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MASTER THESIS

The Role of Institutional Environment in the Creation of Different Types of New Ventures by Student Entrepreneurs

Master's Thesis by the 2nd year student

Concentration – Master in Management

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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Описание цели, задач и основных результатов	<p>Данная магистерская диссертация является количественным исследованием роли институциональной среды в формировании различных типов бизнеса начинающими предпринимателями на основе выборки 8660 студентов из 46 стран в рамках GUESS. Целью данного исследования является определение взаимосвязи между институциональной средой и выбором различного типа бизнеса начинающими предпринимателями в разных странах. Данное исследование использует линейную регрессию в качестве стратегии эмпирического исследования. В качестве результатов эмпирического исследования была разработана теоретическая модель влияния нормативных и когнитивных факторов институциональной среды на выбор различных типов бизнеса (дарвинианцы, коммунитарии, миссионеры) начинающими предпринимателями. С академической точки зрения данная работа удовлетворяет спрос на исследования влияния институциональной среды на различные аспекты предпринимательства. С практической точки зрения, данная работа будет полезна для органов госрегулирования для понимания различий между структурой типов предпринимательства в стране, а также для формирования условий для развития различных типов предпринимательства и стимулирования инновационного бизнеса</p>
Ключевые слова	Институциональная среда, типы бизнеса, начинающие предприниматели, роль институциональной среды в исследовании предпринимательства, роль институциональной среды в формировании различных типов бизнеса

ABSTRACT

Master Student's Name	Viktor Zadvornov
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Description of the goal, task and main results	<p>This master thesis is a quantitative study on the role of institutional environment in the creation of different types of new ventures by student entrepreneurs based on the sample of 8660 students from 46 countries from GUESS. The goal of this study is to identify relationship between institutional environment and the choice of different types of new ventures by student entrepreneurs in different countries. This study uses linear regression as a method of empirical research. On the basis of the results obtained from empirical study, the theoretical model of the role of normative and cognitive institutional arrangements on the choice of different types of new ventures (Darwinians, communitarians, missionaries) by student entrepreneurs was created. From academic standpoint, this study fulfills the demand on the research in the field of the role of institutional environment on the different aspects of entrepreneurship. Practically, this study will be useful for policy-makers in terms of understanding of country differences in the structure of ventures, and in terms of formulating and promoting the conditions for development of various types of entrepreneurship within the county and stimulation of innovative business</p>
Keywords	Institutional environment, types of new ventures, student entrepreneurs, the role of institutional environment in entrepreneurship research, the role of institutional environment in the creation of different types of new ventures

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INTRODUCTION

In the recent years, researchers have increasingly focused on the interconnection between institutional environment and entrepreneurial research (Crnogaj and Jojnik, 2016; Yousafzai et al., 2015; Urbano and Alvarez) to find out that favorable institutional conditions increase the probability of being entrepreneur and have high impact on the vision for entrepreneurship in the country (Jennings et al., 2013). The research is currently devoted to different aspects of entrepreneurship research in the connection of institutional context (e.g. comparing formal and informal institutional impact (Williamson, 2000), explaining gender differences (Estrin and Mickiewicz, 2011), level and structure of nascent entrepreneurship (Alexandrova and Verkhovskaya, 2016).

Both entrepreneurship practitioners and policy-makers have shown a growing interest in the contextual factors in which entrepreneurial activity takes place (Thornton et al., 2011) and international organizations, such as OECD or EU currently focus on the social and cultural determinants that influence individuals to choose entrepreneurship as a career and they try to understand the pillars which truly affect that choice and implications of this choice, namely, the mission of the firm. These facts prove the relevance of the topic under research.

However, the research is limited on the matter of the role of institutional context in the creation of different type of new ventures and it is important to understand which institutional factors truly explain the differences in the prevalence of one or another type of firm. In the present study, we explored different classifications of new types of firms and concentrated on the classification of Fauchart and Gruber (2011), who divided entrepreneurs into Darwinians (primary goal – financial gains), communitarians (primary goal – serve interests of peer group), and missionaries (primary goal – promote new standards) to understand how they are affected by institutional context.

The entrepreneurship approach in terms of cultural context gives us a deeper understanding of the specificity of the studied phenomenon. That is because the mode of action of individuals depends on specific social cultural codes (Bayad and Bourguiba, 2006), and in the current paper we mostly focus on the influence of normative and cognitive dimensions given the integral role of regulative dimension in entrepreneurial activity.

The goal of this paper is to identify the relationship between institutional context and the types of new firms created by student entrepreneurs in different countries.

Theoretically, this paper contributes to the current research by examining institutional context in different countries as a source of different structure in new ventures composition within the country. Practically, it will provide understanding for the policy-makers and managers on the

difference on the country level in entrepreneurial intentions in the context of national culture and cognitive pillars and give insights on the levers to use this differences to create various kinds of conditions in order to promote this or that venture type in the country.

As a result of theoretical overview of different venture classification and literature review on the role of institutional environment in entrepreneurship research the hypotheses of the study will be formulated and then tested empirically.

The GUESSS-2016 survey database will be used in the present study as a data sample on which will be tested the effects of institutional environment, the data on which will be taken from Global Competitiveness Report-2016, Hofstede Center Report and GEM report.

1. THE NEW VENTURE TYPES AND THE ROLE OF INSTITUTIONAL ENVIRONMENT IN ENTREPRENEURSHIP

The first chapter is devoted to building the theoretical framework of the present study and divided on the following areas: analysis of approaches to classify new ventures in entrepreneurship research, literature review on the empirical studies on the role of institutional environment in the entrepreneurship research, theoretical framework of the study and description of hypotheses to be tested.

First, the historical overview of different approaches to classify new ventures that exist in the literature is done. The purpose of it is to analyze the evolution of criteria and parameters used by scholars to categorize new ventures from the mid of twentieth century to the present times and choose the classification that will be suitable for the objectives of the present study.

Second, the literature review of the role of institutional environment in the entrepreneurship research is done. The aim is to analyze existent research on the topic, outline major research areas and build deep understanding of the topic to formulate hypotheses of the study later on.

Lastly, the theoretical framework and hypotheses are presented. Hypotheses are formulated based on analysis of literature on the venture types and literature review of the role of institutional environment in the entrepreneurship research and are comprehensively described and rationalized. The theoretical framework is visualized to better grasp the overall picture of the present study.

1.1 Approaches to classify new ventures in entrepreneurship research

In this part of the first chapter the various approaches to classify new firms in entrepreneurship will be considered in historical order based on their classification criteria in order to understand the evolution of this stream of research, and choose the one classification that will be suitable for the present study. The aim of this chapter is to determine the classification of new ventures for which application of institutional theory will be both relevant and useful to achieve the objective of the present study.

Significant growth in the quantity and quality of published research in entrepreneurship over the past three decades has produced relatively few general laws, law-like generalizations, empirical regularities, or agreed upon principles when it comes to the nature and behavior of entrepreneurial firms (Busenitz et al. 2003; Gartner 2007; Wiklund et al. 2011; Zahra and Newey 2009). Of the many aspects of context mentioned in theoretical, conceptual, and empirical studies, arguably the most emphasized is the organization setting or venture context—small business, new venture, family business, emerging enterprise, technology venture, established company, social

venture, high growth firm (Shane 2012; Ucbasaran et al. 2001; Zahra 2014). Venture context thus refers to the organizational arrangements or formation where new venture activities are restrained or encouraged in a specific direction. Consistent with this view, Shane and Venkataraman (2000, p. 217), in addressing issues of context, refer to “some aspect of the setting (e.g., small businesses or new firms)” and explain that “the focus in the entrepreneurship literature is on the performance of individuals or firms in the context of small or new business.”

Attempts to study venture context have failed to produce a consensus regarding exactly what constitutes an “entrepreneurial firm” (Bruyat and Julien 2001; Shane 2009; Welter 2011; Wiklund et al. 2011). That is, a wide range of venture contexts have been examined in the entrepreneurship research, with general conclusions drawn regarding “the entrepreneurial context.” Yet there is little agreement as to whether this refers to a high growth context (e.g., Shane 2009), a context with a high entrepreneurial orientation (e.g., Covin and Slevin 1989), one in which new enterprise is being created (e.g., Davidsson, Low, and Wright 2001), or simply new venture formation (Klyver, Hindle, and Meyer 2008; Reynolds and Curtin 2009).

Researchers first adopt a more inclusive perspective on the entrepreneurial context, one that emphasizes the creation and development of new ventures of all types (Davidsson 2005; Gartner 1990; Mintzberg 1989). Using this broader delineation, the entrepreneurial context includes emerging firms that may or may not grow, do or do not innovate, can fail or succeed, and vary considerably in their economic impact. Yet this approach produces such a diverse mix of ventures as to further thwart any attempt at generalizing across the entrepreneurial context. As such, it becomes important to identify different categories of entrepreneurial ventures, an issue highlighted by early researchers (Carland et al. 1984; Filley and Aldag 1978; Miles et al. 1978; Smith and Miner 1983), but one not sufficiently reflected in contemporary entrepreneurship theorizing and associated empirical research.

The need to contextualize entrepreneurship theory to reflect the types of ventures is emphasized. Consistent with Welter (2011), it is argued that the combination of venture type and identity represent a distinct lens through which to view and understand entrepreneurial activity.

The question ‘how to classify new ventures?’ remains open in the field of entrepreneurship research. In practice, different scholars who conduct research in the field set various parameters to define their sampling frames, select various classification criteria, adding a great deal to this controversy. The first notable attempt to categorize new ventures was made by Webster (1977) who saw the importance of treatment of various types of identifiable ventures and noted the absence of this classification at that time. As a result he identified several types of entrepreneurial ventures and presented the formula to classify them based on entrepreneurial identity. In his approach he outlined five types of new ventures, using early works of Collins and Moore (1970).

He defined the following types: a) Cantillion – firms based on rational decisions, striving for profit maximization and assuming managerial and other risks in exchange for profits; b) Industry-maker – firms that have pioneer spirit as a nation builder, industry builder that are built on a total personal fortune, large risks and ability to create a big step into establishing of a new business model; c) Administrative – firms that are created on much smaller scope, usually as a reorganization of existing firm and focused on maintaining of their position without taking on themselves much of the risks associated with two previous types; d) Operator – firms limited in their scope, profit potential and reach and mainly focused on serving other types of ventures outlined before; they choose low stable reward for low risk; e) Independent – firms that are created from scratch, without long-term goals, being risk-taker and at the same time risk-avoider and striving to try a new business model without putting much of the funds in there. The limitation of his approach was a view of the venture type only from economic standpoint and two associated dimensions – profit and risk.

The next stream of scholars aroused in the beginning of 1980's, who tried to deal with classification of venture types using three variables: environment, structure, and strategy making (Carper and Snizek, 1980; De Vries, 1977; Mintzberg, 1979; Toulouse, 1980). The most notable and comprehensive approach was offered by Miller (1983), who proposed to correlate of entrepreneurship vary in a systematic and logical way from one type of firm to another. He focused mainly upon environmental and strategy making variables of Mintzberg (1979) and also employed surrogates for structural variables. In his typology he has broken down new firms in the following way: a) Small firms – firms operating in homogenous environment and generally run by owner-managers where power is highly centralized, making this firm simple and undiversified. Typically, it has little or no techno structure, few support staff, minimal differentiation with intuitive rather than analytical strategy making. Success of these firms is determined by personality, power and store of knowledge of the leader; b) Planning firms – firms with emphasis on smoothness, efficiency and regularity of planning. They tend to focus on machine-like harmony, reflecting this by the structure of their organization, usage of elaborate control and planning systems, application of structural integration devices, and decision making that is concentrated in the hands of central group of managers and technocrats. They are associated with a systematic, orderly process of innovation and product-market renewal. Success of these firms is determined by clear, explicit, well-integrated strategies of executives; c) Organic firms – firms that tend to operate in dynamic environments where customer tastes, product-service technologies and competitive weapons are characterized by unpredictability and heterogeneity. As a result, these firms are associated with organic structure that are responsive for any challenge that emerges in the environment, delegating of power to lower level employees, high usage of scientists and technocrats to create innovative

products, continuous discovery of opportunities, high differentiation, extensive internal communication in decision-making process. Success of these firms is dependent on the speed and quality of their response to market challenges and opportunities. This stream of research looked deeper into what differentiates new ventures, exploited three variables but still looked more into the managerial, economic, and strategy differences among firms rather than ideological.

A beginning point in achieving greater clarity is to consider two extremes. On the one hand, Gartner (1988) defines entrepreneurship in terms of venture start-ups, where an entrepreneurial firm is defined by the act of organization creation (Mintzberg 1989). Such a view produces a very sizable and dynamic population of firms for investigation. On the other hand, based on the seminal work of Schumpeter (1934), only truly disruptive firms that, once launched, produce dynamic disequilibrium and creative destruction are entrepreneurial.

In this respect the work of Lafuente and Salas (1989) deserves some attention. These scholars built their typology on the basis of the work expectations, education, age, origin, and other personal characteristics of the founder, thus looking deeper into the identity. They employed approach of Storey (1982), who was one of the first who noticed the need to focus on personal characteristics of founder in determining the strategy of firms they manage. They defined the following venture types: a) craftsman-firm – firms made by individual who wants to decide for himself the type of work he wants to do and desires to make that work free from someone else's authority and interests; b) managerial firm – firms, define by profit-seeking motivations and by the individual wish to manage and exert power; c) family firms – firms oriented onto operating in relatively stable environment and serve interests of their peers; d) risk-taking firms – firms that are oriented on investigation of new opportunities, creating new business models and don't afraid of risk. This classification had some limitations, namely, it was hard to distinguish between craftsman and risk-taking firms and at the same time craftsman and family firms because some of the criteria intersected.

The stream of research in 1990's was noted by more attention towards identity of founder and various psychological characteristics of him or her that later define the type of the firm. One more classification deserves our attention in that respect. Alsos and Kolvereid (1999) decided to look into experience of entrepreneurs, dividing them into novice, serial, and parallel ones and compare them empirically through the following lenses: business planning, financing of the new firm, and interaction with external environment. Later, Hang and Gimeno (2007) also looked on founder identity and add to the research their classification as well that was based on two dimensions: identity complexity and identity-centrality and found out 7 different types of new ventures: reckless, team leader, innovative, market-oriented, owner, dependable. This classification even given the fact that it was a deeper insight into the identity still repeated

limitations of previous studies: it was rather complex, some types had intersections and identity was considered only from economical stand-point with neglecting motivational factors.

While 2000's was noted with decreasing focus into the field of classification of entrepreneurial ventures, in 2010's we again have a rise of interest. Currently, researchers try to accumulate previous research and propose a categorizing that will cover both economic stand-point and motivational.

For example, Flanagan and Palmer (2010), considered a sample of nascent student entrepreneurs and proposed a new classification based on theory of planned behavior by Ajzen (1991). They outlined the following types of new ventures: a) lifestyle ventures – firms that are not going to grow, planning to be managed with a intent of making moderate income but their priorities are to maintain a certain lifestyle of involved people (working from home, doing something they love); b) small high income ventures – these firms again are enjoying to remain small but wants to have large profits; c) high growth ventures – firms with a goal to become large and profitable as fast as possible, to be among the top tier of business world. This classification was rather simple and looked partly at motivation, but still it was mainly in frame of economic orientation of the business but not identity.

Fauchart and Gruber (2011) in their study on typology of entrepreneurs and associated typology of firms looked deeper into social identity theory, and the literature on social cognition (Tajfel, 1972, Tajfel and Turner, 1979), to improve understanding of the heterogeneity in meaning that founders associate with their entrepreneurial endeavors, firm creation process and results of their operations. In their typology, they defined 3 types of new ventures: a) Darwinian – firms that are created mainly to extract economic profit; b) communitarian – firms that are created to serve interests of particular group of people and community; c) missionary – firms that are created to propose new social and political standards. This classification is quite attractive since it was first to identify such type as missionary that was never outlined before; then, it was a clear distinction between making money and serving different needs of society.

Lastly, Morris et al. (2016) in their study tried to summarize recent and historical research and propose a new classification which by their opinion is the most relevant. They subdivided entrepreneurial new ventures by the following types: a) Survival ventures – firm that exists to provide basic financial needs for the founder, the firm that can be even not officially registered, has very few assets and mainly operates on cash and has no capacity to generate excessive cash for expansion; b) Lifestyle ventures – firms that provide relatively stable income stream for owners, have workable business model and allow for relatively modest reinvestments into growing; c) Managed growth ventures – firms that allow relatively high reinvestment, have regional growth, ongoing operations and new product launches; d) Aggressive growth ventures –

firms with strong innovation capabilities, seeking exponential growth and attracting investments, trying to go global. This classification is comprehensive from economic stand-point but again it is hard to differentiate from firms and highlight transitional types and primary motivation behind making money is not considered.

These varied perspectives create a significant range of options of classifying new ventures. All of them may be useful for research but highly depend on the focus of the research. In table 1 the various classifications of new ventures that are present in the literature are shown.

Table 1. Classifications of ventures by entrepreneurship scholars

Authors	Classification criteria	Types of ventures
Parsons (1956)	Function in society	oriented on economic goals/oriented on political goals/Integrative/pattern maintenance
Haas et al (1966)	99 variables (e.g. type of business, technology, size, # of employees etc)	Class 1 firm to class 10 firm
Pugh et al. (1969)	Structure of activity, concentration of power, line control of workflow	full/workflow/nascent/pre-workflow/personal/implicit
Webster (1977)	The perceived payoff per principal	Cantillion/industry-maker/operator/independent
Miller and Friesen (1978)	rationality, heterogeneity, dynamism, centralization, temperament	adaptive/dominant/giant under fire/entrepreneurial/innovator
Filley and Aldag (1978)	Goals, leadership, structure, staff, functional development, innovation, risk-taking	Craft/promotion/administrative
Glueck (1980)	Strategic priorities, goals, hiring, management practices	Family/entrepreneurial
Miles et al. (1978)	Configuration of technology, structure, strategy	defenders/analyzers/prospectors/reactors
Miller (1983)	environment, structure, decision-making, strategy	simple/planning/organic
Ronstadt (1983)	Growth	lifestyle/small-profitable/high growth
Smith and	Customer mix, product mix,	Rigid/adaptive

Miner (1983)	production method, markets, change plans	
Carland et al. (1984)	Launch of new goods, production methods, markets, supply sources	small business/entrepreneurial venture
Lafuente and Salas (1989)	Work experience, education, age, origin	Craftsman/managerial/family/risk-taking
Vesper (1990)	Growth, capitalization, sector, degree of innovation	low-pay/high-pay/high growth
Roberts (1991)	Technological orientation	High-tech/non-high tech
Hisrich and Peters (1998)	Growth orientation	lifestyle/foundation/high potential gazelle
Alsos and Kolvereid (1999)	Experience	Novice/serial/parallel
Kunkel(2001)	context of entrepreneurial behavior	Independent/corporate
Flanagan and Palmer (2010)	Planned behavior	lifestyle/high income/high growth
Fauchart and Gruber (2011)	Identity of entrepreneur	Darwinian/Communitarian/Missionary
Morris et al. (2016)	profitability, growth, reinvestment ability	Survival/lifestyle/managed growth/aggressive growth

In order to select the classification of new ventures for the current study the following criteria were used:

- Actuality of classification – the classification should be of the last 10 years;
- Applicability of classification for the sample – the classification should be applicable for the sample of student entrepreneurs;
- Focus of classification – the classification should be focused not only on economic characteristics but also on identity and motivation of founder to apply institutional theory and national and cognitive institutions especially;

- Availability of data for the empirical study - the classification should be suitable for questions in the GUESSS survey;

Among all the classifications that were discussed before, the classification of Fauchart and Gruber (2011) suits all the above criteria, therefore, it will be chosen for our analysis and further uncovered in this chapter.

In frames of this thesis the classification of the firms based on the classification of founder identity (Fauchart and Gruber, 2011) will be used. The effects of founder's identity on an emerging organization are relatively strong (Barney et al., 1998; Whetten and Mackey, 2002) because the decisions are usually made by a single person (founder), and therefore type of the new venture is a reflection of the founder identity. The paper revealed that entrepreneurs are different in three major dimensions: basic social motivation, self-evaluation, frame of reference. The differences are summarized in the table 2.

Table 2. Identity dimensions (Fauchart and Gruber, 2011)

Identity dimensions	A	B	C
Basic social motivation	Self-interest (money, wealth)	Support of the community	Advancing the cause (supporting of political vision)
Basis of self-evaluation	Professionalism	Authenticity	Responsible behavior
Frame of reference	Competitors	Community	Society

Based on this variance we can extract three types of new ventures that can be used for further analysis in order to understand the role of institutional context in forming of one or another identity and thus venture type.

The first type of ventures – Darwinian firms. This is the kind of traditional business-oriented firms. They were created in the first place to be a profitable business ventures. As a reflection of the founder's identity seeking for success and personal wealth, these firms are created in the 'business school' like approach, with careful planning and understanding of the product, customer, competitors and other stakeholders. Darwinian firms are managed with modern business principles; high emphasis is given to the assessing of various risks and response to any external changes. Competitors for Darwinian firms are rivals and points of reference at the same time: they seek to gain competitive advantage and employ best practices, trying to be the best in the market.

Darwinian firms are keen to diversification; it is not a big problem for them to expand and meet various emerging options as a potential lucrative move. They are focused on doing what

customer enjoy and address known demand, deriving it from careful market analysis. Internally, these firms are concentrated on achieving maximum profitability by cutting costs via outsourcing or careful supplier analysis; by protecting their property rights via patents; by trying to create economy of scale and adjust to mass market production.

Talking about Darwinian firms we can think of Silicon Valley startups, where entrepreneurs and venture capitalists start their firms, knowing from the first day their vision, trying to achieve either a disrupting business idea or sell it to larger company later (Casnocha, 2011).

Next, there are communitarian firms. These kinds of firms reflect their founder identity, who is starting new business in the way they want it to be, with personal passion and interest in their venture. The primary goal of this kind of venture is enthusiasm and desire to contribute to the community with products and services that will be enjoyed and recognized by customers. In the ventures of this type we can clearly see the strong identification of the brand, and founders believe in the authenticity of their assets and products. They carefully identify the needs of community and ready to invest in high differentiation of their offerings, even if it is costly. Care, high quality, value of opinion of customers - the characteristics of their strategy.

Development of this type of ventures is tightly connected with the customers because they are the frame of references in terms of firm strategy. Communitarian firms are strongly dividing their potential customers on those who are 'in the group' and outsiders. Communitarian firms in most cases are created not because a careful analysis was run prior the launch but because of the feedback of customers who enjoyed the prototypes and are eager to buy the products afterwards. The customer needs addressed with the new product reflect needs of the founder himself. These firms, as was said above, are not seeking the profit in the first place, therefore, in their development they not trying to cut costs to standardize the product offering but rather tend to use highly individual and artisan approach; moreover, they are not against to share their methods and vision with the community and other players in the market, valuing the exchange with fellow enthusiast.

Lastly, missionary firms. This kind of ventures serve as powerful agents of change in the society, trying to advance particular causes, oriented on society or environment. Their goal is not to grow until they become rich and highly profitable enterprises but rather to achieve sustainability, ensure better business processes, motivate other players in the market to follow them by being an example or role model. The principle of missionary firms is to affect others' well-being, positively influence the world and to contribute to the healthy development of society. They want to show that alternative practices are possible, that the money-making is not the primary goal of the venture. Moreover, they address the needs large society in common but not their customers only.

Missionary firms choose the market to serve not because by positive expected gains or by product-orientation. Such firms are constantly seeking a larger audience, that is congruent with their political vision. They try to achieve as many people as possible and be heard by them. The type of product they sell is not the one which is most attractive, most profitable or most cost-efficient. These are the products that are intended to change the patterns of consumption, arise environmental behavior, motivate people to show example for other members of society. As a production tools and methods, missionary firms choose socially responsible production methods, even if they are expensive and not giving large returns. Moreover, they build strict criteria to choose suppliers and distributors of their production, and are ready to share their best practices with anyone who also want to make the world better place to live in.

Despite of the fact that these kind of ventures is known to be social entrepreneurship in sense, it doesn't mean that in all cases they don't make profit (Casnocha, 2011).

1.2 The role of institutional environment in entrepreneurship: literature review

The research on the role of institutional environment in entrepreneurship encompasses broad areas of science, including management, sociology, entrepreneurship research, and institutional economics. As soon as the topic is broad and there is a goal to encompass all the relevant publications in the field, it was decided to run search and selection of research papers for analysis in two stages.

On the first stage, the articles were selected from the most established databases of journals in the field of management: EBSCO, Web of science and Scopus that led us to cover many relevant articles on the role of institutional environment in entrepreneurship. The search of the articles in above-mentioned databases was executed by entering into the search line the query 'entrepreneurship' and also simultaneous entering of the key words related to the institutional environment (entrepreneurship AND institutional environment; entrepreneurship AND institutional context; entrepreneurship AND institutional theory; entrepreneurship AND impact of institutions; entrepreneurship AND institutional pillars). Search was executed by the name of article, key words in the articles, and annotations of articles. In the process of selection, each article was checked on the relevance to the topic and correspondence to the selection criteria. Therefore, after the careful search and the removal of repeated articles, 68 articles were chosen in the three databases on the role of institutional environment in entrepreneurship research.

On the second stage, the articles chosen for the analysis on the first stage were carefully analyzed and distributed by the academic journal. This led to more careful evaluation of their relevance and correspondence to the research topic, and assessment of their quality depending on

the rating of the academic journal. For the purposes of current study, only the articles that were published in the most competent journals and relevant for the research topic were selected. To estimate the competence of journals, the ABS rating of journals by association of UK business schools-2015 was used together with the Financial Times rating of academic journals. As a result of the selection process, the total number of articles used for the literature review amounted to 44.

The articles used for the analysis were published in 30 academic journals, 15 of which are belong to A and B categories of ABS. In these categories of journals 29 articles out of 44 (66%) are published: 18 articles in A journals and 11 articles in B journals. The selected articles belong to the following areas of management as: management, economics, small business, entrepreneurship, social science etc. The majority of articles are published in the following journals: Journal of Business Venturing (7 articles) and Entrepreneurship, Theory and Practice (6). Distribution of articles by academic journal is presented in the table 3.

Table 3. Distribution of articles by academic journal

Name of the journal	Number of articles
<i>A and B rated journals from ABS rating, namely</i>	29
Journal of Business Venturing	7
Entrepreneurship, Theory and Practice	6
Small Business Economics, Journal of Small Business Management, Academy of Management Journal, Entrepreneurship and Regional Development,	2
Journal of Economic Literature, International Small Business Journal, Organization Science	1
<i>C and D rated journals from ABS rating and other journals</i>	15
Total:	44

The analysis of articles was done through the comprehensive study of content of articles, with special attention to analysis of main parts: goal of the study and research questions, theoretical framework of the study, research method, and research findings. As a result of literature review the main research directions and findings were identified.

The selected journals were published in the period from 2000 to 2017. Distribution of articles by the research area is presented in the table 4. The majority of articles (33) use social-

organization approach to classify institutions in their empirical studies, while the rest (11) rely on the new institutional economics approach.

Table 4. Distribution of selected articles by research area

Research direction	Number of articles
Application of social-organization institutional classification in empirical studies	33
Application of new institutional economics institutional classification in empirical studies	11
Total:	44

In most of empirical studies related to institutional environment in entrepreneurship, the two approaches of classification of institutions are presented: new institutional economics approach by Williamson (2000) and social-organization approach by Scott (1995) with the predominance of the latter one.

Williamson in his paper broken down institutions onto formal and informal ones. Formal institutions are institutions that receive legislative framework, supported by specially authorized persons (judicial authorities). They are officially described in documents and are applied to all individuals (citizens). It is applied to the property, labor, management authority. Formal institutions are often created to serve the interests of those who control the institutional changes in the economy. The pursuit for self-interest for one could have a negative effect for others.

Informal institutions are the ethical conventions and ethical codes of conduct (traditions, customs and habits). Their functioning depends on the availability of social sanctions and formed by culture. These rules apply to limited socio - homogeneous groups. Informal rules regulate power, property and labor. Informal institutions form a sort of underwater part of an iceberg. They are spontaneously formed, without anyone's conscious intention, as a by-product of the interaction of many people, pursuing their own interests.

Formal institutions can quickly change, whereas informal change slowly and gradually. And the fact is that formation of institution is a long and complex, and continuous process caused by the development of society.

On the other hand, many researchers tried to classify institutional environment into logical parts. The major classification today is the one of Scott (1995), later developed by many researchers (Urbano and Alvarez, 2014; Kshetri and Dholakia, 2011; Yano et al, 2013), that breaks down institutional environment into regulative, normative and cognitive dimensions.

Regulative dimension is built on insights from institutional theory regarding regulations, policies, rules and laws that affect individual behavior (Scott, 1995; Veciana and Urbano, 2008)

and their subsequent influence on economic growth. These regulative processes can either promote entrepreneurship or hinder it by shaping the level of risk involved in the formation and start of a business, and entrepreneurial behavior is influenced by rules adopted and their enforcement (Baumol and Strom, 2007);

Researchers tend to carefully explore the role of this dimension in entrepreneurship. For example, Kshetri and Dholakia (2011) based on the WBES survey found out that the regulatory institutions to support entrepreneurship don't develop uniformly across all countries. Authoritative regimes might be able to create environment favorable for entrepreneurship without reforms. However, they got to the discovery that despite unfavorable regulative dimension, China's entrepreneurial performance is quite strong. In another WBES study, based on 20-country data, Tonoyan et al.(2010) discovered that corruption is present in many economies in transition mostly because of the overall quality of the formal and informal institutions. Effective institutionalization of legal and financial frameworks is a precondition that must be fulfilled to improve corruption. Informal institutions are required for arranging and enforcing corrupt deals. It was later supported by Estrin et al. (2013), who found out that entrepreneurs in institutional environments which are more corrupt and have greater scale of government activity have lower employment growth aspirations. There is no significant impact of the strength of IPR on entrepreneurs' growth aspirations. Social effects might moderate effects of institutional context: embeddedness in local social network decreases the significance of macro effects (corruption, government activity)

Normative dimension incorporates social norms, values, and beliefs related to human behavior (Busenitz et al., 2000; Scott, 1995). Values and norms determine human behavior, doing so mainly through background influence (Hofstede, 1980). The legitimacy of normative perspectives is established based on the acceptance of that behavior (Veciana and Urbano, 2008). If we incorporate these insights into entrepreneurial research, it can be seen how attitudes, beliefs, and expectations shape entrepreneurial decisions, actions and intentions (Stenholm et al., 2013; Krueger et al., 2000).

The research that tries to explore the role of normative dimension in entrepreneurship is rather rare, however, we may highlight the paper of Casson (2003), who found out that a country that promotes industrial progress will confer high status on entrepreneurs as compared to countries which value maintained stability. Also, it was found by Mueller and Thomas (2001) and later supported by Dickson and Weaver (2008), that countries that are more individualistically oriented as compared to collectivism cultures have higher variability in entrepreneurial orientation. This dimension was also explored on the dataset, containing 42 countries, by Cullen et al. (2013), who concluded that cultural values related to achievement (i.e. performance orientation) lead to increased rates of entrepreneurship when traditional paths in life are blocked. Performance

orientation dominates cultural values. Family collectivism predict more OE when educational system is low, social stratification take place, and government is secured.

Cognitive dimension constitutes the nature of the reality and the cognitive frameworks through which individuals interpret information (Stenholm et al., 2013). Its influence and legitimacy in a society is based on the common conceptualization or interpretations of a particular state which are adopted and shared between individuals (Scott, 1995). Entrepreneurship researchers have built on these findings to suggest that perceptions of general and technological risk as well as attitudes toward uncertainty affect entrepreneurial activity on the country level (Dickson and Weaver, 2008). Based on this core insight, various scholars explored the role of these cognitive schemas in the entrepreneurial activity. For example, Vaillant and Lafuente (2007) discovered that the fact that person live in rural area has no significant impact on probability to become entrepreneur. Individuals with higher level of education are more likely to become entrepreneur. Self-confidence has significant impact on probability of becoming an entrepreneur, while Dorado and Ventresca (2013) found out that the research is needed on institutional that can stir up individual motivations and alter decision-making logic. They are fresh starting points for research to explain systems change that addresses complex social problems without recourse to unusually heroic and talented actors.

Building on these evidence, as well as recent findings exploring the differences in entrepreneurial cognitions across countries (Mitchell et al., 2002), some scholars highlighted the notion that there are regional differences in entrepreneurial cognition and opportunity-seeking; and, in fact, this is the case (Bosma and Levie, 2010; Mitchell et al., 2002); as cross-country differences in culture, perceptions of entrepreneurial activity, and cognitive pillars are probably to influence entrepreneurial activity in the country. Additional work suggests that the regional cultural environment can affect perceived entrepreneurial opportunities more than the political context (Mai and Gan, 2007), at least in part due to the lack of entrepreneurial networks and their capacity to promote and sustain a platform through which individuals engage in sense-making activity (Owen-Smith and Powell, 2008).

Aside from the dimensional perspective, some researchers are focusing on other specific aspects of institutional environment. For example, Yukhanaev et al. (2015) concentrate on the barriers that institutions create for entrepreneurial activity and discovered in their study that poor institutional quality deters entrepreneurship in Russia, impacting negatively on the country's small and medium sized business development and growth prospects. Lack of clarity in the 'rules of the game' are at the center of ineffective and unproductive business-government relations in Russia. Earlier, Williams and Shahid (2014) ran a survey for nearly 300 entrepreneurs in Pakistan and found out that Entrepreneurs that are operating on the wholly informal basis are more likely to be

low-income, with lower educational levels, younger. For them there is high level institutional asymmetry. Those who operate on largely informal basis vice versa to the previous group. Reducing the asymmetry between formal and informal institutions will improve the level of formalization of entrepreneurs. Furthermore, in one of the most recent studies on the topic, Gohar and Abrar (2016) realized that Weak structure of formal institutions has a negligible impact on women entrepreneurship development in Pakistan. Women are least connected to these institutions. However, regulative institutions can be regarded as 'problem creators'.

While most entrepreneurial researchers have focused on the micro-level explanations, it is becoming more and more clear that the research on entrepreneurial activity is tightly connected with context, where it occurs in the first place (Welter and Smallbone, 2011). This context is the so-called institutional environment, which received greater attention in the beginning of 21 century (Shane, 2003; Williamsson, 2000; Busenitz et al., 2000). It involves the institutional level, formed by political, economic, and cultural environment in which entrepreneur operates (Crnogaj and Jojnik, 2016). This first major stream of research on the topic is mainly concerned with showing and explaining the interconnection between institutional environment and entrepreneurship in general (Wennekers et al, 2002; Szyliowicz and Galvin 2010).

The already performed detailed researches are mainly confirm that there is a significant connection between institutional environment and entrepreneurial activity (Fotopoulos, 2012; Tang and Koveos, 2004; van Stel et al., 2014; Aparicio et al., 2016). The condition of external macro environment can promote and encourage entrepreneurial activity; however, it may also slow it down. Therefore, this line of research intentionally assumes correlation between the entrepreneurship and economic growth/development, believing that the improvement of institutional environment is crucial for development of entrepreneurship (Wennekers et al., 2005).

The importance of this intersection was raised by Tolbert et al. (2011): 'institutional approach comparing to economic approach suggests that decisions to create new firms are rather social products, shaped by definitions of entrepreneurship as an appropriate kind of economic behavior, varying across time, space and social networks'.

To detect the role of institutional context in the entrepreneurship we may see that they are tightly connected with decisions on all stages of venture creation process (Tolbert et al, 2011). One stream of research on this point (Baron et al., 1999; Burton and Beckman, 2007) provides an evidence on the role of institutions in such decisions. For example, in one of the early works in the field, Greenwood and Hinings (1988) conducted the survey with about 200 Californian startups and identified a few implicit, distinctive models of organization that guided founders' decision. They included 'engineering', 'star', 'bureaucracy', and 'commitment' and each distinguished by a specific intersection of compensation, control, and selection practices. They are described as

‘blueprints’ for organizational design that founders believe are associated with effective organizations. Most of the studies provide serious evidence that institutions have an influence on decisions associated with entrepreneurial ventures, structures, practices, and behaviors and these influences are critical for research in the field of entrepreneurship.

Another stream of research is devoted to determine the role of institutional context on the country and regional levels, to compare this role across different markets and economies, and to define major patterns.

Most of studies in this domain are based on Global Entrepreneurship Monitor (GEM), encompassing either country regions (EMEA, developed markets etc) , or focusing on specific geographic areas (Latin America, Asia-Pacific etc), or getting insights from the particular country.

Researchers in this field is trying to explain various macro entrepreneurial data (e.g. rate and type of entrepreneurship, gender differences, entrepreneurial motivation, opportunity vs necessity entrepreneurship, attractiveness of conditions in the country for entrepreneurship) by drawing in institutional theory. While the previous part of research is related more to defining the evidences that relationship between institutional theory and entrepreneurship exist, this stream of research takes it as a fact and uses it to find patterns, insights and explain variety on the country or regional level.

One of the first researches in the field, Busenitz et al. (2000) introduced and validate a measure of country institutional profile for entrepreneurship, highlighting three dimensions – regulative, normative, and cognitive that will be discussed in deep in the next chapter. His method was in identifying 17 institutional items and including them into the survey. Based on 639 observations, he was able to prove this instrument and explain much of country’s differences in entrepreneurial activity with institutional context. Moreover, his scale had another usefulness: with this distinction into three dimensions, it became possible to highlight strengths and weaknesses in each country’s institutional environment and direct policymakers into improvement of particular characteristics.

More recent research is mostly concerned in identifying specific influence of institutional context on the entrepreneurship. For example, Williams and Vorley (2015) in their survey of 210 entrepreneurs tried to determine the role of institutional context for entrepreneurs in Bulgaria. Results showed asymmetry between formal and informal institutions, and in EMEA formal institutions have changed much faster than informal ones followed them. As a result, it led to the culture that averse to entrepreneurship. They identified fostering of entrepreneurial activity in the country as a long-term project, which is dependent on congruence between formal and informal institutions.

Another stream of research inside this group is aimed to employ Busenitz instrument (Busenitz et al., 2000) to various economic regions. For instance, Manolova et al. (2008) tried to validate this instrument to the economies in transition, while Xheneti and Bartlett (2012) looked for constraints of entrepreneurial growth through the lens of countries' institutional profiles. Last 5 years showed that researchers tend to develop more subtle relationships between institutional context and entrepreneurship on the country level. Based on GEM database, various papers contributed to the field with new discoveries. Sambharya and Musteen (2014) ran empirical research to understand relationship between institutional conditions in the country and the choice between opportunity-driven entrepreneurship and necessity-driven one. The result was the discovery that necessity-driven entrepreneurship is stimulated by less market openness, greater power distance, and collectivism. While less market openness, lower regulatory quality and lower power distance stimulate opportunity-driven entrepreneurship.

In another research, Stenholm et al. (2013) questioned whether differences in institutional arrangements influence both the rate and the type entrepreneurial activity in the country. The empirical result based on 63 countries from GEM database showed that Supportive regulative institutional arrangements is the key driver of increase in the rate and type of entrepreneurial activity in the country.

Lastly, it is worth to mention the paper of Welter and Smallbone (2011), who summarized research in the field with their qualitative article and found out that The cognitive principles of entrepreneurial behavior are similar regardless of the environment. However, meaning and understanding of institutions is specific to particular cultures and time periods, this leads to differences in entrepreneurial behavior. In challenging environments, there is specific interplay between individual entrepreneur behavior and external environment.

The major stream of current research is devoted to identifying the role of specific institutions in the entrepreneurship on the country level. Many researchers during the last 5 years chose not to generalize the influence of institutional context but rather to focus on specific aspects of institutional environment in the country. Thus, many qualitative and empirical studies shed the light on the real drivers of entrepreneurship among institutional levers. In the table 5 the summary of the literature review is presented.

Table 5. Summary of the empirical studies on the role of institutional environment in the entrepreneurship research

Examples of empirical studies	Research question	Main findings
<i>Generalistic studies on the role of institutional environment in entrepreneurship</i>		

[De Clercq et al., 2011;Sobel,2008;Willamson, 2000]	How institutional environment is connected to the entrepreneurial activity?	- Institutional environment is directly connected to the entrepreneurial activity
[Fotopoulos, 2012; Tang and Koveos, 2004; van Stel et al., 2014]	What are the linkages between institutional theory and entrepreneurship?	- Better institutional quality results in higher probability to become entrepreneur, in higher levels of formal, opportunity driven and productive entrepreneurship
[Aparicio et al., 2016; Crnogaj and Jojnik, 2016;Yousafzai et al., 2015]	What is the current state of research in the field?	- Institutional theory is quite abundant in the current research in entrepreneurship and play important role in empirical studies to understand country-level differences in entrepreneurial endeavors
[Jennings et al.,2013; Bjerregaard and Lauring, 2012]	What is the influence of institutional context on gender/type/form/development variations in entrepreneurial activity in general?	- institutional environment affect probability to become entrepreneur and leverage variations in gender/form/type of entrepreneurial activity in general - Better institutional quality results in higher probability to become entrepreneur, in higher levels of formal, opportunity driven and productive entrepreneurship
<i>Empirical studies with new institutional economics institutional classification</i>		
[Euni and Manolova, 2013; Stenholm et al., 2013]	What is the influence of formal and informal institutional arrangements on the region level (or on the level of particular country) ?	- Principles of institutional context are uniform; while meaning and understanding of institutions are specific to particular cultures or time periods, which leads to differences in entrepreneurial behavior
[Xheneti and Bartlett, 2012; Welter and Smallbone, 2011]	How formal institutions affect entrepreneurial activity?	- Formal institutions are not developing uniformly across countries; there is always some differences
[Manolova et al., 2008; Aidis et al., 2008; Busenitz et al., 2000]	What is the degree of influence of informal institutions on particular country?	- Informal institutions are more important in economies in transition; formal in developed markets
	Which barriers are created by formal institutions and how	- Weak structure of formal institutions has negligible impact in EMEA and economies on

	they affect entrepreneurship?	transition on entrepreneurship. However, these institutions are seen there as ‘problem creators’ -
<i>Empirical studies with social-organization institutional classification</i>		
[Aleksandrova and Verkhovskaya, 2016; Williams and Vorley, 2015; Sambharya and Musteen, 2014]	How country’s three-dimension institutional context affect entrepreneurial activity?	- In terms of three-dimensional approach to institutional environment, we may identify country’s strengths and weaknesses in conditions for entrepreneurship
[Gohar and Abrar, 2016; Yukhanaev et al., 2015; Williams and Shahid, 2014; Yano et al., 2013; Cullen et al., 2013; Kshetri and Dholakia, 2011; Tonoyan et al., 2010; George and Prabhu, 2000; Autio and Fu, 2015]	What is the impact of regulative (normative/cognitive) institutions on the entrepreneurship on the country-level?	- Supportive regulative institutional arrangements is a key towards attractiveness of entrepreneurship in the country - Role of normative dimension is much higher in the economies in transition - Development of regulative institutions can promote entrepreneurial activity in the country
[Dau and Cuerva-Cazurra, 2014; Estrin et al., 2013; Dorado and Ventresca, 2013; Lim et. al, 2010; Vaillant and Lafuente, 2007]	What is the difference in terms of specific institutions between regions or countries?	- The perception of regulative and normative dimensions across EMEA is mostly negative - Poor quality of specific institutions affect entrepreneurial environment in the country, lack of clarity in the ‘rules of the game’ is at the center of ineffective and unproductive entrepreneurship

1.3 Theoretical model of the role of institutional environment in the creation of different types of new ventures by student entrepreneurs

From the overview of the role of institutional context in the entrepreneurship research which was provided above and empirical studies related to it we can conclude that institutional environment shape many processes in entrepreneurship, and proved to be a major determinant of entrepreneurial activity in the country.

This research will be concentrated on student entrepreneurs, who are selected as a representative sample of nascent entrepreneurs – individuals who are currently involved in a not-

yet-up-and-running start-up (Davidsson and Gordon, 2012) and seriously affected by the institutional environment in their motivation and decisions. Therefore, the research on this sample will be actual since it will contribute to the understanding on how institutional arrangements affect their decisions and adaptation in entrepreneurial process. Moreover, student entrepreneurs are chosen since the data for the empirical analysis (GUESSS) is based on them.

Among the two approaches to classify institutions, we will concentrate our efforts on the one proposed by Scott (1995), since we want to differentiate normative and cognitive institutions from each other by their effect on type of firm chosen, and that will be impossible using 'informal' classification subtype. Moreover, this classification is much wider represent in the current research and it will be relevant to use it.

As soon as literature suggests that regulative dimension exercises the direct independent influence on the form of entrepreneurial activity (Autio and Fu, 2015), is at center of effective and productive entrepreneurship (Yukhanaev et al., 2015), influences allocation of entrepreneurial endeavors (Bowen and De Clercq, 2008), shapes both identification of opportunities by entrepreneurs and the way they exploit them (Tolbert et al., 2011), increases probability of becoming entrepreneur (Urbano and Alvarez, 2014), significantly affects venture arrangements in the country (Lim et al., 2010), and plays an integral role in shaping entrepreneurial activity in general (Williams and Vorley) to better substantiate, isolate and extract the effects of normative and cognitive dimension on types of new firms, regulative dimension will be excluded from our analysis.

The vast majority of cross-national research investigating entrepreneurial activity and national culture relies on Hofstede's (2001) model. Among the dimensions offered by Hofstede, individualism has the most extensive entrepreneurship research history (Hayton et al., 2002). This dimension promotes the values of autonomy, self-sufficiency, and competitiveness. While there is no empirical evidence of the magnitude, or even presence, of individualism in the expectations of nascent entrepreneurs, Cooper, Woo, and Dunkelberg (1988) observed that existing entrepreneurs reported the odds of their business 'succeeding' to be significantly higher than historically observed and substantially better than the odds of success for other similar businesses. They concluded that the observed differences in expectations was likely caused by ex post decision bolstering, in that once the entry into self-employment had been made, entrepreneurs were likely to justify this choice by believing it would lead to success. In this study setting, ex post decision bolstering cannot be a cause of individualism, as the expectations observed are elicited before the venture is operational. Values of individualism promote acting independently from organizations, the pursuit of personal goals at the expense of group loyalty, therefore such cultures value personal success (Messner and Rosenfeld, 2001). This motivates people to seek increased achievement,

increased desire to differentiate themselves from others, so we hypothesize:

Hypothesis 1: Individualistic cultures are positively associated with the creation of communitarian firms

On the other side, we have collectivistic cultures, where is a greater concern for common ends (Trompenaars and Hampden-Turner, 1998). These cultures encourage group loyalty, collective goals, promote values accepted by the group, and group cohesion (House et al., 2004). Collectivism implies subordinating personal interests to the interests of the group and is based on cooperation and harmony, as well as a concern for the well-being of the group. In collectivist cultures, people feel that they are an indispensable part of the group and are unconcerned both about their own benefit and about the possibility that others may exploit their efforts (Hui and Triandis 1986). Hofstede (2001, p. 226) says “members of the we-group are distinct from the other people in society who belong to they-groups or out-groups, and there are many such people and such out-groups. The in-group is the major source of one’s identity and the only secure protection one has against the hardships of life. Therefore, one owes lifelong loyalty to one’s in-group, and breaking this loyalty is one of the worst things a person can do”. Loyalty to the group is an essential element in collectivist cultures, where resources are shared.

In these cultures, there is a preference for a tightly-knit framework in society in which individuals can expect their members to act in accordance with interests of the group and collectivistic values could drive social entrepreneurship (Puumalainen et al., 2015), therefore we hypothesize:

Hypothesis 2: Collectivistic cultures are positively associated with the creation of missionary firms

Another concept that is vastly used in entrepreneurship research is power distance. It describes the extent of inequality that exist between authorities and those that are ruled, and the level of acceptance of it by society (Hofstede, 1983). People in societies with high power distance accept a hierarchical order in which everybody has a place and which needs no further justification. In societies with low score on this dimension, people strive to equalize the distribution of power and demand justification for inequalities of power. The nature of missionary entrepreneurs as those who create hybrid organizations that combine different institutional logics, exercise counterfactual thinking, and legitimate the new organizational form (Tracey et al., 2011) implies that cultures with low power distance would be more receptive to this kind of firms. Moreover, the mission of such organizations is to reduce the inequalities of power and promote new social standards. Also, studies on the effects of power distance to entrepreneurship have usually found a negative effect (Kreiser et al., 2010; Shane, 1992; Williams and McGuire, 2010). Thus, it is expected that the prevalence of missionary firms is negatively connected with power distance, so we hypothesize:

Hypothesis 3: High power distance cultures are negatively associated with the creation of missionary firms

Uncertainty avoidance (UAI) is another dimension offered by Hofstede, and which refers to the degree to which members of a society feel uncomfortable with uncertain and ambiguous situations (Puumalainen et al., 2015). The basic idea here is how a society deals with the fact that the future could not be predicted. Countries with strong UAI index maintain a more relaxed attitude to it, in which practice counts more than principles. As risk taking and creativity (Schumpeter, 1934) are necessary elements of any type of entrepreneurship; it is more likely to have higher prevalence of communitarian firms in societies with weak uncertainty avoidance. A low score on the uncertainty avoidance index indicates that the people in the country are more comfortable with ambiguity, more entrepreneurial, more likely to take risks, and less dependent on structure rules. Countries with high uncertainty avoidance scores desire more stability, more structured rules and social norms, and are less comfortable taking risks. The nature of communitarian founders is to create the firm despite of all the obstacles just because they feel the need to it, and therefore, we hypothesize:

Hypothesis 4: Low uncertainty avoidance cultures are positively associated with the creation of communitarian firms

Last dimension that will be discussed in the present research is long-term orientation. Every society should maintain some links with its own past while dealing with the challenges of the present and the future. Societies with low score on this dimension, prefer to maintain time-honored traditions and norms, while viewing societal change with suspicion. Those with high score, take a more pragmatic approach: encourage thrift and efforts in modern education to prepare to the future (Hofstede, 2003). To survive in a competitive environment, entrepreneurs would need to have qualities that are consistent with higher LTO cultures (Osoba, 2009). As soon as Darwinian firms strive to create sustainable competitive advantage to achieve their goals, analyze everything deeply before start a new business, and rely heavily on consistent innovation and modernization to stay competitive, we can hypothesize:

Hypothesis 5: Long-term oriented cultures are positively associated with the creation of Darwinian firms

As soon as entrepreneurial activity is an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this and the distinct conditions of the respective environment in which the individual is located (Bruton, et al., 2010), and the fact that Darwinian founders heavily rely on identification of proper opportunities and carefully analyze these opportunities before starting a new business, we can hypothesize:

Hypothesis 6: High perceived opportunities cultures are positively associated with the creation of darwinian firms

Hypothesis 7: Low fear of failure cultures are positively associated with the creation of darwinian firms

To better grasp the overall picture of relationship between the institutional context in the country and the types of new ventures created by entrepreneurs the Figure 1 is presented, which is based on the results of literature review and theoretical overview of the types of new ventures.

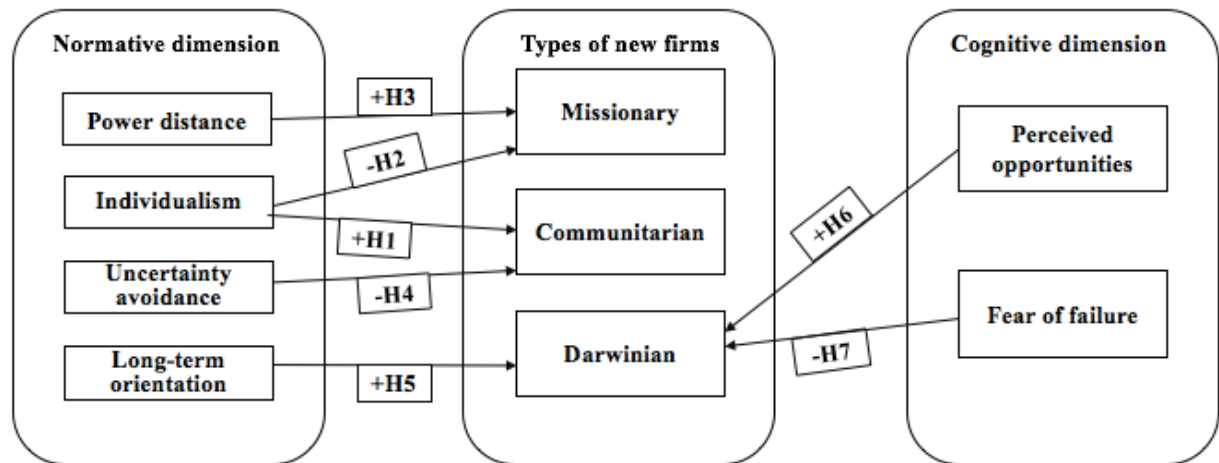


Figure 1. Theoretical framework

With this relationship identified from literature review the empirical part of the study may be started, where it will be explored which of these institutions and to what degree affect the type of the new venture created by student entrepreneurs. By conducting the quantitative analysis we will be able to determine the impact each dimension has on the type of firm chosen and derive final conclusions.

Based on theoretical review conducted in this chapter we outlined seven hypotheses which will be tested in the empirical part of this study; summary of hypotheses is provided in table 6.

Table 6. Summary of the hypotheses to be tested

H	Description
H ₁	<i>Individualistic cultures are positively associated with the creation of communitarian firms</i>
H ₂	<i>Collectivistic cultures are positively associated with the creation of missionary firms</i>
H ₃	<i>High power distance cultures are positively associated with the creation of missionary firms</i>
H ₄	<i>Low uncertainty avoidance cultures are positively associated with the creation of communitarian firms</i>

H ₅	<i>LTO cultures are positively associated with the creation of Darwinian firms</i>
H ₆	<i>High perceived opportunities cultures are positively associated with the creation of Darwinian firms</i>
H ₇	<i>Low fear of failure cultures are positively associated with the creation of Darwinian firms</i>

In the first chapter of the present study the theoretical framework was established and hypotheses formulated based on conducted theoretical analysis of typologies of new firms and literature review of the role of institutional environment. Hypotheses, formulated in this chapter, will be later tested empirically by linear regression. Design of the research, description of the method and variables, and results of the study will be presented in the next chapter.

2. THE ROLE OF INSTITUTIONAL ENVIRONMENT IN THE CREATION OF DIFFERENT TYPES OF NEW VENTURES BY STUDENT ENTREPRENEURS: EMPIRICAL EVIDENCE FROM 46 COUNTRIES¹

This chapter aims to establish the methodological basis for analyzing the role of institutional environment in the creation of different types of new ventures by student entrepreneurs and present results of analysis for further discussion. Our empirical study is a regression analysis; therefore, we describe the sample, data sources, variable choice, and then outline the econometric models used to conduct the analysis.

2.1 Method

Data sources

To test the effects of institutional environment on the types of new ventures created we employed the data from GUESSS (Global University Entrepreneurial Spirit Students' Survey) international project. This is a database of empirical studies that is coordinated by Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen (KMU-HSG). Coordinators of the project are responsible for search of national representatives of the project in the participating countries and for the creation of the international report about the results of the project. The International report has comparative analysis of data that came from all the countries.

The international project GUESSS was conducted once per two year beginning from 2003. In the very beginning it was named ISCE – International Survey on Collegiate Entrepreneurship, but was renamed in 2008. At the time of this study, 7 international surveys were conducted overall – in 2003, 2004, 2006, 2008, 2011, 2013/2014, and in 2016. In 2016 there were 122509 respondents from 187 countries.

Russia firstly participated in the GUESSS project in 2011 when 2882 students from 23 universities were surveyed. In 2013/2014 a Russian team of GUESSS participated in the project in the second time. Data were collected from October, 2013 till February, 2014, and 32 universities were encompassed by the survey. In 2016 survey that was done from May till July, 33 Russian universities participated. Graduate School of Management in Saint-Petersburg (GSOM SPBU) is a national partner of the GUESSS project in Russia. The research team from GSOM is responsible

¹ Argentina, Australia, Austria, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, El Salvador, Estonia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Latvia, Lebanon, Luxembourg, Malaysia, Morocco, Netherlands, Peru, Poland, Portugal, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom, Uruguay

for the search and attraction of Russian universities, translation of the survey and distribution of the link on the web-survey among national universities. A Russian leader of the project GUESS, Professor Galina V. Shirokova provided access for the GUESSS-2016 survey results, which were employed for the present study.

The students, comprising dataset, can be divided into 3 groups: those who don't want to establish their own business, nascent entrepreneurs, and active entrepreneurs. In light of this particular study we decided to concentrate our efforts on nascent entrepreneurs who think of establishing their own business in the near future.

As a first step we needed to adjust our sample of GUESSS survey participants by the following criteria:

- Remove active entrepreneurs and those who don't want to establish new business;
- Remove those participants who didn't answer the section related to venture-type (section 8.3)
- Remove those participants who are originally from countries on which we don't have data from Global Competitiveness Report 2016, GEM 2016, and Hofstede center

Thus, the final sample was comprised from **8660** students from **46** countries.

Description of variables

In the present study, the following variables are used:

Dependent variable

As a dependent variable, the perceived type of new venture (identity) was chosen, which was measured as a dominant goal of nascent entrepreneurs to establish the new business. As a part of GUESSS survey 2016, students were offered to answer the questions regarding their primary motivation and goal in venture creation process based on the Likert scale.

To assess the type of venture based on the approach of Urbano and Alvarez (2014), we addressed the set of statements related to motivation and goals (8.3 GUESSS survey 2016) and grouped these statements to fit one of the venture types (Darwinians, Communitarians, Missionaries) as shown in table 7.

Table 7. Subdivision of statements in the GUESSS (2016) Motivation and goals section by venture type

Statement	Associated venture type
<i>I will create my business in order ...</i>	
1. ... to make money and become rich	Darwinian
2. ... to mainly achieve financial success	Darwinian

3. ... to advance my career in the business world	Darwinian
4. ... to be able to signal my capabilities to others	Communitarian
5. ... to solve a specific problem for a group of people that I strongly identify with	Communitarian
6. ... to play a proactive role in shaping the activities of a group of people that I strongly identify with	Communitarian
7. ... to solve a societal problem that private businesses usually fail to address	Missionary
8. ... to do something that allows me to enact values which are core to who I am	Missionary
9. ... to play a proactive role in changing how the world operates	Missionary
<i>As a firm founder, it will be important to me ...</i>	
1. ... to operate my firm on the basis of solid management practices	Darwinian
2. ... to have thoroughly analyzed the financial prospects of my business	Darwinian
3. ... to provide a product/service that is useful to a group of people that I strongly identify with	Communitarian
4. ... to convey to my customers that I want to satisfy their needs rather than just to do business	Communitarian
5. ... to be able to express to my customers that I fundamentally share their views, interests and values	Communitarian
6. ... to be true in serving a group of people that I strongly identify with	Missionary
7. ... to be a highly responsible citizen of our world	Missionary
8. ... to make the world a 'better place'	Missionary
<i>When managing my firm, it will be very important to me ...</i>	
1. ... to have a strong focus on what my firm can achieve vis-à-vis the competition	Darwinian
2. ... to establish a strong competitive advantage and significantly outperform other firms in my domain	Darwinian
3. ... to have a strong focus on the group of people I strongly identify with	Communitarian
4. ... to support and advance the group of people that I strongly identify with	Communitarian

5. ... to have a strong focus on what the firm is able to achieve for society-at-large	Missionary
6. ... to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses	Missionary

Source: GUESSS (2016)

The answers had a range from ‘1’ (strongly disagree) to ‘7’ (strongly agree). Thus, it was possible to sum up all the scores by venture type. Afterwards, the mean score by each component was calculated to assess the belonging to the venture type:

$Y1 = \text{Darwinian-mean} = (\text{Sum of Darwinian statements scores})/7$

$Y2 = \text{Communitarian-mean} = (\text{Sum of Communitarian statements scores})/8$

$Y3 = \text{Missionary-mean} = (\text{Sum of Missionary statements scores})/8$

The effects of institutional environment on each of these venture types will be later tested in our three linear regression models.

Independent variables

The data on institutions dimensions (independent variables) were taken from corresponding reports for each country in the analysis.

The data for normative dimension was taken from the Hofstede center report on the cultural dimensions on country level. The findings of this research and theoretical ideas are used worldwide in both psychology and management studies. Particularly, many researchers used this dataset for running studies on entrepreneurship (Luczak et al., 2014; Stenholm et al., 2013; Sambharya and Musteen, 2014). Most often, it can be used for extracting data on normative dimension of institutional environment.

Next, we used data from the GEM report for each country to assess cognitive pillar of institutional environment in analyzed countries. GEM is widely used in entrepreneurship research, being the most popular choice of researchers to run empirical studies (Crnogaj and Jojnik, 2016; Yousafzai et al., 2015; Urbano and Alvarez, 2014; De Clercq et al., 2011).

To test the effects of institutional environment on the type of new firm chosen, it was decided to choose 6 variables, 2 per cognitive dimension and 4 per normative dimension.

Normative dimension was represented in this study by 4 variables – degree of individualism, long-term orientation, uncertainty avoidance, and power distance. All measures were taken by country from Hofstede center. These variables are represented in the existing research (Cullen et al., 2013; Williams and Shahid, 2014) and tightly-connected with the venture types and suitable to test our hypotheses.

Cognitive dimension is represented in this study by two variables – fear of failure and

perceived opportunities scores. Both measures were taken by country from GEM 2016. The research with the usage of these variables by other scientists (Dorado and Ventresca, 2013; Lim et al., 2010) and could be suitable to test our hypotheses.

The detailed overview of variables measures by country could be found in the appendix 1.

Control variables

In our empirical study, the following control variables will be used:

On the country level we will include GDP per capita (PPP) for 2017 year taken from Worldbank, Total early-stage entrepreneurial activity (TEA) and entrepreneurial intent in the country both taken from GEM; on the family level we will take existence of family-owned business taken from GUESSS; on the individual level we will use age of the respondent, specification of education, and gender all taken from GUESSS. These measures were proved important for venture creation process and thus for the type of firm chosen by previous research done (Arenius and minniti, 2005; Bhandari, 2012; Sanchez-Famoso et al., 2015).

Empirical models

Linear regression models are widely used in the research connected with entrepreneurship and aimed to understand the shaping role of institutional environment in it (Urbano and Alvarez, 2014; Autio and Fu, 2015; Cullen et al., 2013; Stenholm et al., 2013). Therefore, for the purposes of our study it was decided to run three linear regression models to understand the effects of institutional environment on the decision to establish one of the three types of ventures (Darwinian, Communitarian, Missionary).

Our linear regression models will help us to determine which factors have the most impact on the firm chosen. In our case, as soon as we have more than one explanatory variable multiple linear regression approach will be employed.

The following carcasses of models will be used in the study with adjustments based on conducted tests of fit for the estimators described above:

1. Model for Darwinian type firms:

Darwinian type firm mean score

$$= \alpha_0 + \beta_1 \text{Individualism} + \beta_2 \text{LTO} + \beta_3 \text{Uncertainty avoidance} \\ + \beta_4 \text{Power distance} + \beta_5 \text{Perceived opportunities} + \beta_6 \text{Fear of failure}$$

2. Model for Communitarian type firms:

Communitarian type firm mean score

$$= \alpha_0 + \beta_1 \text{Individualism} + \beta_2 \text{LTO} + \beta_3 \text{Uncertainty avoidance} \\ + \beta_4 \text{Power distance} + \beta_5 \text{Perceived opportunities} + \beta_6 \text{Fear of failure}$$

3. Model for Missionary type firms:

Missionary type firm mean score

$$= \alpha_0 + \beta_1 \text{Individualism} + \beta_2 \text{LTO} + \beta_3 \text{Uncertainty avoidance} \\ + \beta_4 \text{Power distance} + \beta_5 \text{Perceived opportunities} + \beta_6 \text{Fear of failure}$$

2.2 Results

Descriptive statistics

To provide the reader with a comprehensive overview of the data, in this section we present descriptive statistics of the variables used in this study; the summary statistics is presented below in the table 8.

Table 8. Summary statistics

Variable	Mean	Std. Dev.	Min	Max	Observations
Darw	5.485	1.04	1	7	8660
Comm	5.519	1.05	1	7	8660
Miss	5.538	1.18	1	7	8660
GDP (PPP)	34495.04	24507.78	7224	131063	8660
TEA	10.68	5.48	4.07	31.83	8660
EI	21.24	13.93	2.12	63.76	8660
Family-owned business	0.11	0.38	0	1	8660
individualism	43.68	22.93	13	91	8660
lto	46.529	23.32	7	100	8660
Perceived opportunities	41.13	14.24	12.95	81.53	8660
fear of failure	38.24	7.1	20.95	52.74	8660
Power distance	57.64	20.39	11	100	8660
Uncertainty avoidance	67.04	20.51	29	100	8660

Gender	0.51	0.48	0	1	8660
Age	24.29	4.62	18	47	8660
Specification of education	0.37	0.39	0	1	8660

The tests of hypotheses of our research was done through running 3 linear regression models. Model 1 is aimed to analyze the role of institutional environment in the creation of Darwinian firms by nascent entrepreneurs. Model 2 and 3 are analyzing the effects on communitarian and missionary firms respectively. The results of empirical study are presented in the table 9.

Table 9. Results of linear regression analysis

Variable	Model 1	Model 2	Model 3
Uncertainty avoidance	0.005***	-0.045***	0.007***
	(0.000)	(0.000)	(0.000)
Power distance	-0.011***	0.011***	0.016***
	(0.000)	(0.004)	(0.000)
Perceived opportunities	0.003**	0.0003	0.03***
	(0.018)	(0.845)	(0.000)
Fear of failure	-0.012***	-0.009	-0.004*
	(0.000)	(0.682)	(0.093)
Individualism	-0.007***	0.0027***	0.0008
	(0.000)	(0.006)	(0.599)
LTO	0.0014	-0.0046***	-0.012***
	(0.347)	(0.003)	(0.000)
Gender	-0.003	-0.0003	-0.004
	(0.361)	(0.911)	(0.219)
GDP Per capita PPP	-0.005***	-0.023	0.0012
	(0.001)	(0.869)	(0.295)
Specification of education	0.003	0.06***	0.042*
	(0.903)	(0.007)	(0.098)

Family-owned business	0.002	-0.0005	-0.003
	(0.449)	(0.856)	(0.326)
Age	-0.003	-0.0009	-0.0002
	(0.244)	(0.721)	(0.301)
TEA	0.004***	-0.071***	-0.11***
	(0.000)	(0.000)	(0.000)
EI	-0.015***	0.021***	0.003
	(0.000)	(0.000)	(0.341)
a ₀	6.61	5.67	4.9
F	43.09	42.43	104.24
R ²	6.08%	6%	13.55%
ΔR ²	5.94%	5.86%	13.42%

Note: N =8660 , *p<0,1, **p<0,05, ***p<0,001

The results of empirical analysis suggest that there is statistically significant relationship between individualistic national cultures and the creation of communitarian firms (b=0.003; p=0.006) and we could accept our H₁. This can be explained by fact that due to the nature of communitarian entrepreneur and his or her desire to promote own vision and serve the group he relates to, it is much more probable to have this kind of firm in the individualistic culture.

At the same time, based on the results we could see that H₂ must be rejected, since we found we didn't find significant statistical evidence (p=0.599). It suggests that those founders in their desire to change the vision and promote new social standards try to differentiate from established group norms and not to support them and for them personal vision and motivation aligns with group norms, and it could arise in any culture. This is in line with the research of Urbano and Alvarez (2014) and proves their conceptual explanation of missionary firms

We can accept our hypothesis 3. The results show (b=0.016; p=0.000) that for missionary firm founders the power distance in the society has sparkling effect and among all other factors in the model power distance has the highest impact on the dependent variable. It can be explained by the fact that these firm founders are quite prevalent in societies where they can attract attention to the current problems, which are not arisen by the policy-makers, and they can promote new social standards, new vision and get more attention for it in contrast to low power distance cultures. In high power distance, they attract attention to the freedom and equality of rights, while in low power distance cultures they consider social and environmental entrepreneurship.

The results suggest that we can accept our hypothesis 4 and state that communitarian firms

are positively associated with low uncertainty avoidance in the society ($b = -0.005$; $p=0.000$). Given the nature of communitarian founder, it is plain to think that they could not be risk averse and their desire to establish new business relates to mental societal formation to not afraid of proceeding with new business.

Next, we reject hypothesis 5 – we found no significant evidence that Darwinian firms are associated with long term oriented cultures ($p=0.347$). While, this group of founders seriously evaluate their opportunities before proceed with them, seek competitive advantage by applying new technological advancements and innovations, they are still prevalent In cultures with short-term orientation, where traditional norms and ways of doing business are promoted. And as it can be seen in both cultures they can achieve success.

Next, hypotheses 6 is also proven by our model and we can state that Darwinian founders are more prevalent in high perceived opportunities cultures ($b = 0.003$; $p=0.018$). Again, this is just another proof of nature of Darwinian founder. Before to proceed with the creation of new business, he or she needs to have several available opportunities from which to pick and evaluate the most attractive ones.

Finally, we could accept the negative relationship between fear of failure in the society and creation of Darwinian firms ($b=-0.012$; $p=0.000$). Moreover, we can see that there is no statistically significant relationship between this variable and two other types of firms. It may be explained by the fact that among all other types of firm, Darwinians seek for financial gains and they carefully evaluate every opportunity before proceed, they try to be logical and not-emotional in their decision-making process, therefore, fear of failure can be strong signal for them to stop any activity (in case it is high), or to proceed with it (in case it is low).

The analysis of control variables such as gender, age, family-owned business suggest that these measures are insignificant predictors of type of firm chosen which was proven by all 3 models and we can see that this choice is much more dependent on country-level differences than on individual ones. Additionally, we found some evidence from analysis GDP per capita and specification of education that Darwinian firms differ from missionary and communitarian. For example, from analysis of GDP per capita it can be seen that the lower GDP in the country the higher is the probability to establish Darwinian firm. This may be explained by the fact that people in societies with low economic development tend to solve their own financial problems in the first place before thinking about social impact and change. From the analysis of specification of education of respondent, business students are much more probable to create communitarian or missionary firms than other majors.

Table 10. Summary of the results of hypotheses testing.

H	Result	Comment
H ₁	significant (b=0.003; p=0.006)	<i>accepted</i>
H ₂	insignificant (p=0.599)	<i>rejected</i>
H ₃	significant (b=0.016; p=0.000)	<i>accepted</i>
H ₄	significant (b=-0.005; p=0.000)	<i>accepted</i>
H ₅	insignificant (p=0.347)	<i>rejected</i>
H ₆	significant (b=0.003; p=0.018)	<i>accepted</i>
H ₇	significant (b=-0.012; p=0.000)	<i>accepted</i>

2.3 Discussion

The present research is based on the classification of Fauchart and Gruber (2011) that entrepreneurial ventures can be divided onto Darwinians, communitarians, and missionaries by the social identity of their founder and it explores the effects of institutional environment, namely, normative and cognitive dimensions (Scott, 1995) on the type of firm chosen. The empirical study was conducted on the sample of 8660 student entrepreneurs taken from GUESSS.

First, the results of the present study support the idea of Fauchart and Gruber (2011) that as soon as differences exist in the identity of founders, which stems from differences in institutional arrangements and country differences, there are differences in the purposes of venture type created by them. These results expand and contribute to the previous studies in the field (Cullen et al., 2011; Stenholm et al., 2013).

Secondly, the results of the current study stay in line with the previous research on the role of normative and cognitive institutional dimensions on entrepreneurial activity, proving the fact that country's institutional characteristics influence the allocation of entrepreneurial endeavors by the type of entrepreneurial activity (Bowen and De Clercq, 2008), and explaining country-level differences (Welter and Smallbone, 2011).

The current study contributes to the existing research in the field in terms of explaining country-level differences in the structure of ventures, focus of the business, and allocation of entrepreneurial efforts, enriching the country-institutional profile research stream, initiated by Busenitz (2000), and contributing to the notion that three-dimensional approach provides a more complete profile of country differences with respect to entrepreneurial activities, and contributing to the research on country-level strengths and weaknesses in terms of entrepreneurial activity (Manolova et al, 2008).

In terms of normative institutional, the effects of Hofstede (2000) cultural dimensions were

tested on the type of firm chosen. First, we looked at the impact of Individualism/collectivism on the type of firm chosen, and found the following evidences: individualistic cultures are positively associated with the creation of the communitarian firms, which proves the findings of Cullen et al. (2013), who stated that cultural values related to the high degree of individualism lead to increased rates of entrepreneurship when traditional paths in life are blocked, highlighting the feature of communitarian entrepreneurs that they tend to use highly individualized, artisanal production methods, consider their products works of art and pay a great deal of attention to each unit produced, stressing their personality and differentiating from others. On the other hand, we found no statistically significant evidence of the impact of this dimension on the creation of missionary firms, which can lead to the notion that these founders can arise in different cultures and their responsibility to the society and environment in setting new standards is not affected by I-C dimension, since this special type of the firm is oriented on changing existing patterns rather than following them (Fauchart and Gruber, 2011).

Next, we looked at the impact of power distance on the new venture choice and found out that high power distance cultures are positively associated with the creation of missionary firms, which is explained by the idea of Franke & von Hippel (2003) that high restrictions in the society provoke some individuals to act as a 'social identity changers' and this is proven by the identity of missionary founders who strive to address new social practices and paradigms, change the world, consumption patterns and their customer vision.

Then, testing the effects of uncertainty avoidance dimension in the culture we proved the hypothesis that communitarian founders are more probable in the low uncertainty avoidance cultures. As risk taking and creativity (Schumpeter, 1934) are necessary elements of any type of entrepreneurship; it is more likely to have higher prevalence of communitarian firms in societies with weak uncertainty avoidance. A low score on the uncertainty avoidance index indicates that the people in the country are more comfortable with ambiguity, more entrepreneurial, more likely to take risks, and less dependent on structure rules (Sobel 2008). The nature of communitarian founders is to create the firm despite of all the obstacles just because they feel the need to it and it is logical to find them more abundant in such cultures that promote these values.

Lastly, in terms of normative institutional context, we looked at long-term orientation cultural dimension, hypothesizing that such cultures have positive relationship with the creation of Darwinian firms. However, we found out that this relationship is insignificant and proved the findings of Fauchart and Gruber (2011), who highlighted Darwinian founders to be more abundant in any type of the culture because practical orientation of such founders on market analysis and other long-term factors is neighboring with strong consideration of traditional ways of doing business and traditional customer beliefs that suggest that it can be explained by the identity of

Darwinian founder who is more dependent on regulative dimension than on informal institutes in their business-decisions, thus culture has little or no impact on them, which contributes to the existent research (Yousufzai et al, 2015; Urbano and Alvarez, 2014; Williams and Vorley, 2015).

On the other hand, we considered internal cognitive pillars that exist in the society on the country-level, namely fear of failure and perceived opportunities, expanding the ideas of Bruton et al. (2010). In this respect, we looked more deeply on the impact of such pillars on the Darwinian founders and found out that the cultures with high perceived opportunities and low fear of failure are positively associated with the creation of such firms, which highlights the focus of such founders on the truly comprehensive approach in the creation of their venture with strong market analysis and careful evaluation of opportunities that are exist (Fauchart and Gruber). Moreover, this relationship again proves the fact that this firms are especially dependent on regulative dimension arrangements, which is a primary factor that affect described cognitive pillars. These findings stay in line with the existing research in the field (Jennings et al., 2013; Welter and Smallbone, 2011; Tonoyan et al., 2010).

Finally, we included control variables on individual, family, and country-level and were able to extend the idea that institutional arrangements are crucial to the understanding entrepreneurial differences between countries (Sobel, 2008) and these differences in terms of venture structure could not be explained by individual, and family level differences, since all the individual level controls proved to be insignificant in their relationship with the choice of venture type, expanding the ideas of Dorado and Ventresca (2013).

CONCLUSION

The purpose of the present study was to identify the relationship between institutional context and the types of new firms created by student entrepreneurs in different countries. It uses over a hundred of academic sources as a theoretical backbone based on which the classification of the new venture types was explored and the one of Fauchart and Gruber (2011) were chosen for the empirical analysis. The comprehensive literature review of the recent empirical studies on the role of institutional environment is used as a starting point for the empirical study of the role of institutional environment on the type of new venture created by student entrepreneurs.

Based on the literature review, normative and cognitive dimension were chosen to test the effects of institutional context on the type of firm chosen, and the linear regression was run on the sample of 8660 students from 46 countries taken from GUESSS. The results suggest that there is a significant relationship between normative and cognitive dimensions and the type of firm chosen, which is stronger than the individual and family differences between people on the country level, and the role of culture was proved to be determining factor in the choice of the type of firm by student entrepreneurs.

Hopefully, results of this study will be found relevant within the academic circle, as this paper touches the highly relevant today stream of research that tries to understand the effect of institutional environment on the entrepreneurship. This study addresses the existing gap in the current research and explores the role of institutional environment on the allocation of entrepreneurial efforts in the country based on the venture type – and by doing so addresses the need highlighted by many well-respected scholars. Additionally, this paper may be utilized by business and government leaders as source of insights for stimulating proactive, innovative, and risk-taking behaviors and creating the environment inside the country which will be supportive for creating various types of firms, and understanding the differences in allocation of new venture types on the country level.

Our results must be viewed in the light of the study's limitations. First, the study was concentrated only on the sample of student entrepreneurs, thus narrowing the scope of the findings. Therefore, future research should consider entrepreneurs more generally to address these findings to the much broader set of actors. Secondly, the study used limited number of factors influencing the type of new firm chosen, concentrating on the broad level country differences taken from Hofstede. To improve the model and get deeper understanding of cross-culture differences in allocating different types of new ventures, future research should include much broader set of variables in the model.

This study creates a vast set opportunities for further research in the field of the role of

institutional environment in the creation of different types of new ventures by student entrepreneurs. Namely, the further research in the field can encompass wider sample of entrepreneurs, taking into account not only nascent but also existing entrepreneurs to highlight the differences in their entrepreneurial endeavors and expand the findings of this paper. Furthermore, this paper provokes testing other institutions from the normative and cognitive dimensions on the type of new firm chosen. The researchers could try to implement different classification of the institutions on the sample of student entrepreneurs, add additional control variables on the country, family, and individual levels to understand more deeply the impact of institutional environment with moderating effect of other factors. Moreover, the research in the field could concentrate efforts on specific macroeconomic regions (EMEA, developed countries etc) to understand how the role of institutional environment differs across different economic areas. Future research may improve the proxy for variables, especially for dependent variables getting closer to the conceptualization of the institutional dimensions. Also, multilevel modelling can be used to address the issues of unobserved heterogeneity within the context of a cross-country and cross-individual data set.

This study also has numerous implications for professors teaching entrepreneurship, business venturing, or small business. Although it is reasonable to assume students registering for and entrepreneurship course are likely to be open to the idea of starting new business, the types of new ventures they have in mind vary greatly. So, this study can contribute to the individual understanding of differences between venture types, address their cultural features in choosing the proper type of business for themselves, and to initiate innovative and risk-taking entrepreneurship.

In summary, institutional context plays an integral role on the type of firm chosen by student entrepreneurs, and cross-cultural differences explain the differences in the structure of venture types within the economy. This paper has added to the literature by closing the existing gap and provoking a new line of future research. The results have implication for researchers, students, policy makers and entrepreneurship practitioners across the globe.

REFERENCES

- Ahlstrom D., B. G. (2002). An institutional perspective on the role of culture in shaping strategic actions by technology-focused entrepreneurial firms in China. *Entrepreneurship: Theory and Practice* 26(4), 53-70.
- Aidis et al. (2008) - Institutions and entrepreneurship development in Russia: a comparative perspective. *Journal of Business Venturing* 23, 656 – 672.
- Alain et al. (2014). Beyond entrepreneurial intentions: values and motivations in entrepreneurship. *International Entrepreneurship and Management Journal*, November 2014.
- Aleksandrova O., Verkhovskaya, O. (2016). Motivation of entrepreneurial activity: the role of institutional environment. *Vestnik SPSU – Management*, issue 3.
- Alexandrova, M. (2004). Entrepreneurship in transition economy: The impact of environment on entrepreneurial orientation. *Problems and Perspectives in Management* 2, 140-148.
- Ali Hassan and Binti Omar (2016). The effect of emotional intelligence and entrepreneurial attitude on entrepreneurial intention. *Journal of Business and Management Review* 12, August 2016.
- Alsos and Kolvereid (1999). The business gestation process of novice, serial, and parallel business founders. *Entrepreneurship, Theory and Practice*, Summer 1998.
- Altinay, L., & Wang, C. L. (2011). The influence of an entrepreneur's socio-cultural characteristics on the entrepreneurial orientation of small firms. *Journal of Small Business and Enterprise Development* 18 (4), 673-694.
- Amirsardari and Maritz (2015). Exploring opportunity identification and opportunity exploitation within the venture creation process. *International Journal of Organizational Innovation* 2.
- Antoncic, B., & Hisrich, R. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing* 16(5), 405–527.
- Arbaugh J., C. L. (2009). Is Entrepreneurial Orientation a Global Construct? A Multi-Country Study. *The Journal of Business Inquiry*, 12-15.
- Ardichvili and Cardozo (2000). A model of the entrepreneurial opportunity recognition process. *Journal of Enterprising Culture* 2, 103-119.
- Autio and Fu (2015). Economic and political institutions and entry into formal and informal entrepreneurship. *Asia Pacific Journal of Management* 32, 67-94.

- Baird, I., & Thomas, H. (1985). Toward a contingency model of strategic risk taking. *Academy of Management Review*, 10, 230-243.
- Barucic and Umihanic (2016). Entrepreneurship education as a factor of entrepreneurial opportunity recognition for starting a new business. *Journal of contemporary management issues*, 2016.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *The Academy of Management Review*, 13, 442-453. 63
- Bjerregaard and Luring (2012). Entrepreneurship and institutional change: Strategies of bridging institutional contradictions. *European Management Review* 9. 31-43.
- Bourgeois, L. (1981). On the measurement of organisational slack. *Academy of Management Review* 6 (1), 29-39.
- Bowen and De Clercq (2008). Institutional context and allocation of entrepreneurial effort. *Journal of International Business studies* 39, 747 – 768.
- Branchet et al. (2017). Modelling entrepreneurship intentions: an essay of typology. *Management International* 21, 109-122.
- Brancu et al. (2015). Is culture a moderator of entrepreneurship motivation? A comparative study of Romania and Iceland. *Amfiteatru Economic* 17(38), 133-147.
- Brazeal, D. (1993). Organizing for internally developed corporate ventures. *Journal of Business Venturing*, 8, 75-90.
- Brown et al. (2009). The rise of GRI as a case of institutional entrepreneurship. *Global Environment Change: Human and Policy dimensions*.
- Brown, S., & Eisenhardt, K. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly* 42 (1), 1–34.
- Bruton et al. (2010). Institutional theory and entrepreneurship: where are we now and where do we need to move in the future. *Entrepreneurship, Theory and Practice*, May, 2010.
- Buzenitz et al. (2000). Country institutional profiles: unlocking entrepreneurial phenomena. *Academy of Management Journal* 5, 994-1003.
- Caruana, A., Morris, M., & Vella, A. (1998). The effect of centralization and formalization on entrepreneurship in export firms. *Journal of Small Business Management* 36(1), 16-29.
- Chandler, A. (1962). *Strategy and Structure*. Massachusetts: MIT Press. Chen, M., & Hambrick,

- D. (1995). Speed, stealth, and selective attack: How small firms differ from large firms in competitive behavior. *Academy of Management Journal*, 38, 453-482.
- Chow, & Hau-Siu, I. (2006). The Relationship Between Entrepreneurial Orientation and Firm
- Chea (2008). Entrepreneurial venture creation: the application of pattern identification theory to the entrepreneurial opportunity-identification process. *International journal of Business and Management*, February 2008.
- Conant, J., Mokwa, M., & Varadarajan, P. (1990). Strategic types, distinctive marketing competencies and organizational performance: A multiple measure-based study. *Strategic Management Journal*, 11, 365-383.
- Cools, E., & Van Den Broeck, H. (n.d.). Development and validation of the cognitive style indicator. *Journal of Psychology: Interdisciplinary and Applied*, 141, 359-387. 64
- Coviello, N. (2006). The network dynamics of international new venture. *Journal of International Business Studies* 37 (5), 713–731.
- Covin, J., & Slevin, D. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies* 25 (3), 217–234.
- Covin, J., & Slevin, D. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 7-25.
- Crnogaj and Jojnik (2016). Institutional determinants and entrepreneurial action. *Journal of Contemporary Management issues*, May 2015
- Cromie (1987). Motivations of aspiring male and female entrepreneurs. *Journal of occupational behavior* 8, 251-261.
- Cullen et al.(2013). National rates of opportunity entrepreneurship: insights from institutional anomie theory. *Entrepreneurship, Theory and Practice*, July 2014
- Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinant and moderators. *Academy of Management Journal*, 55-390.
- Das, T., & Teng, B. (1993). Time and entrepreneurial risk behavior. *Entrepreneurship: Theory and Practice*, 22, 69-88.
- Dau and Cuervo-Cazurra (2014). To formalize or not formalize: Entrepreneurship and pro-market institutions. *Journal of Business Venturing* 29, 668-686.
- De Clercq et al. (2011). Individual-level resources and new business activity: The contingent role of institutional context on new business activity. *Entrepreneurship, Theory and Practice*,

March 2013.

Dorado and Ventresca (2013). Crescive entrepreneurship in complex social problems: Institutional conditions for entrepreneurial engagement. *Journal of Business Venturing* 28, 69-82.

Dougherty, D., & Corse, S. (1995). When it comes to product innovation, what is so bad about bureaucracy? *Journal of High Technology Management Research* 6, 55-76.

Edelman et al. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management* 48, 174-196.

Ejdenberg and Masurel (2013). Entrepreneurial motivation in a least developed country: push factors and pull factors among MSEs in Uganda. *Journal of Enterprising Culture* 1, 19-43.

Engle et al. (2011). Social influence, gender, and entrepreneurial intent: a 14 country study. *Journal of Small Business & Entrepreneurship*, January, 2011.

Ernst & Young. (2014). *Blurring the lines - Trends from the EY Entrepreneur Of The Year 2014TM US finalists*. London: Ernst & Young.

Estrin and Mickiewicz (2011). Institutions and female entrepreneurship. *Small Business Economics* 37, 397-415.

Estrin et al. (2013). Which Institutions encourage entrepreneurial growth aspirations?. *Journal of Business Venturing* 28, 564-580.

Eunni and Manolova (2013). Institutional context for entrepreneurship in EMEA: a nine country comparison of university students' perceptions. *Teaching of entrepreneurship*.

Evangelista (2005). Qualitative insights into the international new venture creation process. *Journal of international Entrepreneurship* 3, 179-198.

Falck et al. (2012). Identity and entrepreneurship : do school peers shape entrepreneurial intentions? *Small Business Economics* 39, 39-59.

Fauchart and Gruber (2011). Darwinians, communitarians and missionaries: the role of founder identity in entrepreneurship. *Academy of Management Journal* 5, 935-957.

Fini and Toschi (2015). Academic logic and corporate entrepreneurial intentions: a study of the interaction between cognitive and normative dimensions. *International Small Business Journal*, April, 2010.

Flanagan and Palmer (2010). An examination of university student entrepreneurial intentions by type of venture. *Journal of Developmental Entrepreneurship* 15, 503-517.

- Fredrickson, J. (1986). The strategic decision making process and organizational structure. *Academy of Management Review*, 11, 280-297.
- Gartner (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10, 696-706.
- George and Prabhu (2000). Developmental financial institutions as catalysts of entrepreneurship in EMEA. *Academy of Management Review* 3, 620-629.
- Gohar and Abrar (2016). Constrained informal institutional influences on women entrepreneurship. Development of Pukhton culture. *FWU Journal of Social Sciences* 10, 80-90.
- Gómez-Haro S., A.-C. J.-P. (2011). Differentiating the effects of the institutional environment on corporate entrepreneurship. *Management Decision* 49 (10), 1677–1693.
- Gorodnichenko, Y., Svejnar, K., & Terrell. (2010). Globalization and Innovation in Emerging Markets. *American Economic Journal: Macroeconomics*, 194-226.
- Greene, P., & Brown, T. E. (1997). Resources needs and the dynamic capitalism typology. *Journal of Business Venturing* 12 (3), 161-173. 66
- Guth, W., & Ginsberg, A. (1990). Corporate entrepreneurship. *Strategic Management Journal*, 11, 5-15.
- Hage, J. (1980). *Theories of organizations*. New York: Wiley.
- Hall, W. (1980). Survival strategies in the hostile environment. *Harvard Business Review*, 75-85.
- Hannibal et al. (2016). Opportunity recognition and international new venture creation in university spin-offs – cases from Denmark and Ireland. *Journal of International Entrepreneurship* 14, 345-372.
- Harms and Schiele (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of international entrepreneurship* 10, 95-106.
- Hayton et al (2011). Entrepreneurial opportunity identification and new firm development process: A comparison of family and non-family firms. *International Journal of Entrepreneurship and Innovation Management*, February 2011.
- Hisrich and Grant (2007). Entrepreneurial research in practice: a call to action for psychology. *American Psychologist*, October 2007.
- Hoang and Gimeno (2007). Becoming a founder: how founder role identity affects entrepreneurial transitions and persistence in founding. *SSRN Electronic Journal*, June 2017.

- Hornsby, J., Kuratko, D., & Zahra, S. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. *Journal of Business Venturing* 17 (1), 49-63.
- James and Gudmundsson (2011). Entrepreneur optimism and the new venture creation process. *Journal of Asia entrepreneurship and sustainability*, 2011.
- Jennings et al. (2013). Institutions, entrepreneurs, and communities. A special issue on entrepreneurship. *Journal of Business Venturing* 28, 1-9.
- Jennings, D., & Lumpkin, J. (1989). Functioning modeling corporate entrepreneurship: An empirical integrative analysis. *Journal of Management* 15 (3), 485–502.
- Jolly and Raven (2013). Collective institutional entrepreneurship and contestations in wind energy in India. *ECIS working paper series*, vol. 201310.
- Jones, G., & Davis, H. (2000). National culture and innovation: Implications for locating global R&D operations. *Management International Review*, 40(1), 11-39. 67
- Karagozoglu, N. B. (1988). Adaptive responses by conservative and entrepreneurial firms. *Journal of Product Innovation Management*, 5, 269-281.
- Khandwalla, P. N. (1997). *The Design of Organizations*. New York: Harcourt Brace Jovanovich.
- Korsgaard, S., & Anderson, A. (2011). Enacting entrepreneurship as social value creation. *International Small Business Journal* 29(2), 135-151.
- Khaola (2010). The impact of the feelings of economic powerlessness and alienation on self-employment intentions. *The journal of language, technology & Entrepreneurship in Africa* 2.
- Khefacha et al. (2014). An estimated model of new venture creation : theories and determinants in Tunisia. *Journal of Enterprising Culture* 22, 161-184.
- Kickul et al. (2009). Intuition versus analysis? Testing differential models of cognitive style on entrepreneurial self-efficacy and the new venture creation process. *Entrepreneurship, Theory and Practice*, March, 2009.
- Kshetri and Dholakia (2011). Regulative institutions supporting entrepreneurship in EMEA: A comparison of China and India. *Journal of international entrepreneurship* 9, 110-132.
- Lafuente and Salas (1989). Types of entrepreneurs and firms: the case of new Spanish firms. *Strategic Management Journal* 10, 17-30.
- Levie et al. (2014). Global entrepreneurship and institutions: an introduction. *Small Business Economics* 42, 437-444.

- Li and Ferreira (2006). The evolutionary model of entrepreneurial firms' dependence on networks/ going beyond the start-up stage. *Kelley School of Business, Indiana university*.
- Lim et al. (2010). Institutional environment and entrepreneurial cognitions: a comparative business systems perspective. *Entrepreneurship, Theory and Practice*, May 2010.
- Lobont et al. (2015). Is cultural diversity a determinant of the entrepreneurial activity?. *Transformations in Business & Economics* 14, 332-354.
- Madsen (2013). Early and rapidly internationalizing ventures: similarities and differences between classifications based on the original international new venture and born global literatures. *Journal of international entrepreneurship* 11, 65-79.
- Maidique, M. A., & Patch, P. (1982). Corporate strategy and technological policy. *Readings in the management of innovation*, 273-285.
- Manolova et al. (2008). Institutional environments for entrepreneurship: evidence from EMEA and Eastern Europe. *Entrepreneurship, Theory and Practice*, January 2008.
- McKague (2011). Dynamic capabilities of institutional entrepreneurship. *Journal of Enterprising Communities People in the Global Economy*, March 2011.
- McMullen et al. (2008). Economic freedom and the motivation to engage in entrepreneurial action. *Entrepreneurship, Theory and Practice*, September, 2008.
- Miles, R., & Snow, C. (1978). *Organizational strategy, structure, and process*. New York: McGraw-Hill.
- Miller (1983). The correlates of entrepreneurship in three types of firms. *Management Science* 29.
- Miller, D. (1983). *The Correlates of Entrepreneurship in three Types of Firms*. *Management Science*.
- Miller, D. (1987). Strategy making and structure: Analysis and implications for performance. *Academy of Management Journal*, 30, 7-32.
- Miller, D. (1988). Relating Porter's business strategies to environment and structure: Analysis and performance implications. . *Academy of Management Journal*, 31, 280-308.
- Miller, D., & Friesen, P. (1978). Archetypes of strategy formulation. *Management Science*, 921-933.
- Miller, D., Droge, C., & Toulouse, J.-M. (1988). Strategic Process and Content as Mediators between Organizational Context and Structure. *The Academy of Management Journal* 31 (3),

544-569.

Moriano et al. (2011). A cross-cultural approach to understanding entrepreneurial intention. *Journal of career development* 10.

Morris et al. (2016). Distinguishing types of entrepreneurial ventures: an identity-based perspective. *Journal of Small Business Management* 2016.

Mortan et al. (2014). Effects of emotional intelligence on entrepreneurial intention and self-efficacy. *Journal of Work and Organizational Psychology* 30, 97-104.

Pascale, R. (1985). The paradox of 'corporate culture': Reconciling ourselves to socialization. *California Management Review*, 26-41. 70

Pearce, J., Kramer, T., & Robbins, D. (1997). Effects of managers' entrepreneurial behavior on subordinates. *Journal of Business Venturing*, 12, 147-160.

Performance in China. *SAM Advanced Management Journal*, Vol. 71 Issue 3, 11-20.

Puumalainen et al. (2015). Comparing social entrepreneurship across nations: An exploratory study of institutional effects. *Canadian Journal of Administrative Sciences* 32, 276-287.

Rowley, J., & Slack, F. (2004). Conducting a Literature Review. *Management Research News*, Vol. 27, Number 6, 31-39.

Ruquelme (2013). In search of entrepreneurial opportunities – integrated model. *Journal of enterprising culture* 3, 249-274.

Sahasranamam and Sud (2016). Opportunity and necessity entrepreneurship: a comparative case study of India and China. *Academy of Entrepreneurship* 22.

Sambharya and Musteen (2014). Institutional environment and entrepreneurship: an empirical study across countries. *Journal of International Entrepreneurship* 12, 314-330.

Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.

Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy*. New York: Harper & Brothers.

Shirokova, G. (2012). Entrepreneurial orientation: the origins of the concept and the main research approaches. *Russian Management Journal*, 55-72.

Sequeira et al. (2009). Transnational entrepreneurship: determinants of firm type and owner attributions of success. *Entrepreneurship, Theory and Practice*, September 2009.

Shane and Venkataraman (2000). The promise of entrepreneurship as a field of research.

Academy of Management Review 1, 217-226.

Shaver and Scott (1991). Person, process, choice: the psychology of new venture creation. *Entrepreneurship, Theory and Practice*, Winter, 1991.

Sobel (2008). Testing Baumol: Institutional quality and productivity of entrepreneurship. *Journal of Business Venturing* 23, 641-655.

Sotarauta and Pulkkinen (2011). Institutional entrepreneurship for knowledge regions. *Environment and Planning C*.

Stenholm et al. (2013). Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing* 28, 176-193.

Tan, J. (1996). Characteristics of regulatory environment and impact on entrepreneurial strategic orientations: An empirical study of Chinese private entrepreneurs. *Academy of Management Best Papers Proceedings, Entrepreneurship Division*, 106-110.

Tang and Koveos (2004). Venture entrepreneurship, innovation entrepreneurship and economic growth. *Journal of developmental entrepreneurship*, 9.

Thomas et al. (2014). The perception of the contextual factors as predictor of entrepreneurial intent: evidences from an empirical survey (2014). *Journal of Enterprising Culture* 4, 375-400.

Thornton, P., Ribeiro-Soriano, D., & Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: An overview. *International Small Business Journal* 29(2), 105- 118.

Tolbert et al. (2011). Studying choice and change: the Intersection of institutional theory and entrepreneurship research. *Organizational Science* 5, 1332-1344.

Tonoyan et al. (2010). Corruption and Entrepreneurship: how formal and informal institutions shape SME behavior in transition and mature market economies. *Entrepreneurship, Theory and Practice*, September 2010.

Urbano and Alvarez (2014). Institutional dimensions and entrepreneurial activity. *Small Business Economics* 42, 703-716.

Vaillant and Lafuente (2007). Do different institutional frameworks conditions influence of local fear of failure and entrepreneurial examples over entrepreneurial activity. *Entrepreneurship & Regional development*, July 2007, 313-337.

Webster (1977). Entrepreneurs and ventures/ an attempt at classification and clarification. *Academy of Management Review*, January 1977.

Welter and Smallbone (2011). Institutional perspectives on entrepreneurial behavior in

challenging environments. *Journal of Small Business Management* 49, 107-125.

Williams and Shahid (2014). Informal entrepreneurship and institutional theory: explaining the varying degrees of (in)formalization of entrepreneurs in Pakistan. *Entrepreneurship and Regional Development: An international Journal*.

Williams and Vorley (2015). Institutional asymmetry: how formal and informal institutions affect entrepreneurship in Bulgaria. *International Small Business Journal* 33, 840-861.

Williams and Wood (2015). Rule-based reasoning for understanding opportunity evaluation. *Academy of Management perspectives* 29, 218-236.

Williamson (2000). The new institutional economics: taking stock, looking ahead. *Journal of Economic literature* 38, 595-613.

Winsor and Hanlon (2016). An opportunity evaluation framework for introductory courses in entrepreneurship. *Journal of entrepreneurship education*, 19.

Xheneti and Bartlett (2012). Institutional constraints and SME growth in post-communist Albania. *Journal of Small Business and Enterprise development* 19, 607-626.

Yano et al. (2013). Property rights, trade credit and entrepreneurial activity in China. *Journal of the Asia Pacific Economy* 18, 168-192.

Yousafzai et al. (2015). Institutional theory and contextual embeddedness of women's entrepreneurial leadership: evidence from 92 countries. *Journal of Small Business Management* 53, 587-604.

Yukhanaev et al. (2015). An investigation into the formal institutional constraints that restrict entrepreneurship and SME in Russia. *Journal of East-West Business* 21, 313-341.

Zanakis et al. (2012). Nascent entrepreneurs and the transition to entrepreneurship: why do people start new business? *Journal of developmental entrepreneurship* 17.

Zhao and Wu (2014). The power of motivation-goal fit in predicting entrepreneurial persistence. *Social behavior and personality* 42, 1345-1352.

Zwan et al. (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review* 6, 273-295.

APPENDIXES

Appendix 1. Normative and cognitive dimension measures by country

Country	Individualism	LTO	UAI	Power distance	Fear of failure	Perceived opportunities
Argentina	46	20	86	49	25.77	44.29
Australia	90	21	51	36	42.87	49.28
Austria	55	60	70	11	37.05	42.24
Brazil	38	44	76	69	36.14	40.23
Bulgaria	30	69	85	70	42.91	21.04
Canada	80	36	48	39	39.01	58.97
Chile	23	31	86	63	42.91	50.38
China	20	87	30	80	49.08	37.33
Colombia	13	13	80	67	20.95	51.4
Croatia	33	58	80	73	35.79	24.55
Egypt	25	7	80	70	27.63	53.5
El Salvador	19	20	94	66	30.76	38.92
Estonia	60	82	60	40	41.15	52.29
Finland	63	38	59	33	37.55	49.11
France	71	63	86	68	40.26	28.58
Germany	67	83	65	35	41.04	37.56
Greece	35	45	100	60	52.74	12.95
Hong Kong	25	61	29	68	37.30	56.76
Hungary	80	58	82	46	43.17	30.11
India	48	51	40	77	37.53	44.34
Indonesia	14	62	48	78	38.84	43.14
Iran	41	14	59	58	43.77	34.44
Ireland	70	24	35	28	39.62	45.23
Israel	54	38	81	13	48.65	53.69
Italy	76	61	75	50	49.36	28.62
Jordan	30	16	65	70	44.34	30.52
South Korea	18	100	49	49	31.54	35.32
Latvia	70	69	63	44	41.11	31.9
Lebanon	40	14	50	75	22.45	59.64
Luxembourg	60	64	70	40	45.77	49.79
Malaysia	26	41	36	100	36.68	25.43
Morocco	46	14	68	70	32.85	44.98
Netherlands	80	67	53	38	37.93	54.25
Peru	16	25	87	64	30.51	56.56
Poland	60	38	93	68	47.55	39.48
Portugal	27	28	99	63	38.12	29.53
Russia	39	81	95	93	44.80	17.88
Saudi Arabia	25	36	80	95	39.43	81.53

Slovakia	52	77	51	100	39.66	23.03
Slovenia	27	49	88	71	33.78	25.34
South Africa	65	34	49	49	31.18	35.03
Spain	51	48	86	57	38.91	25.56
Sweden	71	53	29	31	40.77	78.5
Switzerland	68	74	58	34	31.20	41.42
Taiwan	17	93	69	58	41.02	26.46
Thailand	20	32	64	64	52.10	37.67
Turkey	37	46	85	66	30.88	49.57
United Kingdom	89	51	35	35	35.23	42.3
Uruguay	36	26	99	61	29.70	28.57
United States	91	26	46	40	33.33	57.27

Source: Hofstede center, GEM

Appendix 2. Distribution of articles used in the literature review by journal type

Name	Authors	Number of articles	Rating of the journal
Journal of Business Venturing	Stenholm et al. (2013); Sobel (2008); Jennings et al. (2013); Estrin et al. (2013); Dorado and Ventresca (2013); Dau and Cuerva Cazurra (2014); Aidis et al. (2008)	7	A
Entrepreneurship, Theory and Practice	Tonoyan et al. (2010); Manolova et al. (2008); Lim et al. (2010); De Clercq et al. (2011); Cullen et al. (2013); Bruton et al. (2010)	6	A
Academy of management journal	George and Prabhu (2000); Busenitz et al. (2000)	2	A
Journal of International Business Studies	Bowen and De Clercq (2008)	1	A
Journal of economic literature	Williamson (2000)	1	A
Organization science	Tolbert et al (2011)	1	A
Small Business economics	Levie et al. (2011); Estrin and Mickiewicz (2011)	2	B
Journal of Small Business management	Shumalia et al. (2015); Welter and Smallbone (2011)	2	B

Entrepreneurship and Regional Development	Willams and Shahid (2014); Vailant and Lafuente (2007)	2	B
Asia Pacific Journal of Management	Autio and Fu (2015)	1	B
European Management Review	Bjerregaard and Luring (2012)	1	B
Global Environmental Change: Human and Policy Dimensions	Brown et al (2009)	1	B
Canadian Journal of Administrative Sciences	Puumalainen et al (2015)	1	B
International Small Business journal	Williams and Vorley (2015)	1	B
Journal of Small business and Enterprise Development	Xheneti and Bartlett (2012)	1	C
Environment and planning	Sotarauta and Pulkinnen (2011)	1	C
FWU Journal of Social Sciences	Gohar and Abrar (2016)	1	C
Journal of international entrepreneurship	Samharya and Musteen (2014); Kshetri and Donakia (2011)	2	D
Vestnik SPBU: Management	Alexandrova and Verkhovskaya (2016)	1	D
Amfiteatru Economic	Brancu et al (2015)	1	D
Transformations in Business & Economics	Lobont et al (2015)	1	D
Journal of East-West Business	Yukhanaev et al. (2015)	1	D
Journal of the Asia pacific economy	Yano et al (2013)	1	D
Academy of Entrepreneurship journal	Sahasranamam and Sud (2016)	1	D
Journal of Enterprising Communities: People and Places in the Global Economy	McKague (2011)	1	D
Eindhoven university	Jolly and Raven (2013)	1	D
Entrepreneurship Education – Contemporary Competition	Eunni and Manolova (2013)	1	D
Management: Journal of Contemporary Management Issues	Crnogaj and jojnik (2016)	1	D

Source: The Chartered Association of Business Schools – ABS journal guide